AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

June 15, 1947





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THANK YOU!

It has been a pleasure to serve you another year. Stocks of some items were still rather short, and we were again forced to allocate available quantities and, in some instances, cancel orders. However, there are definite signs of improvement, and we believe the situation will be better this coming year.

We are happy that our service was better this Spring. With a few exceptions, orders were promptly shipped. The shortage of freight cars is being overcome and L.C.L. freight service is improving. Our service this coming year should equal our high prewar standards!

It is too early to have definite information about stocks available for the coming year. There should be an adequate supply of some items, but others still will be scarce. In our opinion, it will be to your advantage to order the major part of your requirements this Summer or by early Fall.

E. S. WELCH, President.



One of America's Foremost Nurseries

E. S. WELCH, President . H. S. WELCH, Vice President . G. L. WELCH, Mgr., Whalesale Sales

AMERICAN NURSERYMAN

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The Nurseryman's Forte: To Make America More Beautiful and Fruitful

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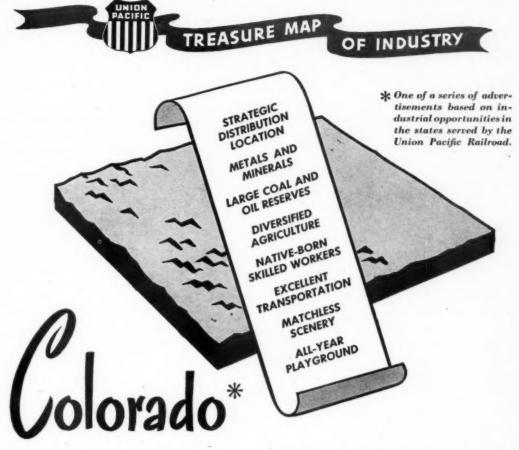
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SPECIAL A. A. N. PRE-CONVENTION NUMBER—OUT JULY 15.

This year the big issue of the American Nurseryman will be the A. A. N. Pre-Convention Number. See page 33 for special features of the year's outstanding issue. Be sure to reserve your space early—do it now!

For the next regular issue, July 1, forms will close June 16.



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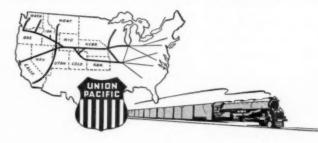
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UNION PACIFIC RAILROAD

THE STRATEGIC MIDDLE ROUTE

AMERICAN NURSERYMAN

F. R. KILNER, Editor

Editorial

HOUSING RECESSION.

There no longer is any doubt that a recession exists in housing construction, reports Trends, a weekly analysis of economic developments. During April construction contracts awarded fell approximately \$250,-000,000 below the total for April of last year. Analyzing the situation, Thomas S. Holden, president of the F. W. Dodge Corp., says: "Duration of the recession is variously estimated. If present maladjustments in construction costs can be corrected in six months, which is conceivable, the industry should come through without serious trouble. Construction demand and available investment funds are factors favoring a short, rather than a prolonged, adjustment period."

A NURSERYMAN'S PRAYER.

Received with a recent letter was an attractive reprint of "A Nurseryman's Prayer," by Mark Rich, in the Progressive Farmer. As he utters it the nurseryman will feel the importance of his calling and the work he is called upon to do for his fellow men. The text follows:

Lord, I thank Thee that Thou hast called me to be a grower of trees—I rejoice that with Thee I can work to make trees fruitful and ornamental. Lord, I glory in the power to remake them through budding and grafting, to redeem them by the knife and pruning shears, to cleanse and free them from disease, and to cultivate and fertilize them to sturdiness.

And for the lessons Thou dost teach me daily, I give Thee thanks. I, too, prone to unfruitfulness, am in great need of Thy pruning shears. I, too, weak and struggling, am in need of the sustaining fertility of Thy love, the nurture of Thy cultivation and care. My mind and heart are beset by devastating diseases, from which only Thy healing and restorative power can save me. God of All Trees and All Men, as these trees grow sturdy and strong in my nursery rows, so help me to grow in Thy nursery. Amen.

TEST SEEDS BY ELECTRICITY.

Use of electric devices to test reactions of the human body—the lie detector being best known—has become so common that one reads reasonably now of a horticultural application which may be of great importance to promote the propagator's output of quality stock, as well as to "take guesswork out of gardening."

This is done by measuring forces

The Mirror of the Trade

exerted by a germinated seed. Briefly, the germinating seed is attached to the apparatus, which then records the electromotive force being emitted by the active cells. A weak seedling will become only a weak plant, and nothing can overcome the initial handicap, for it is inherent. The greater the electromotive force of the seedling, the more vigorous the plant and the higher the yield, as is to be expected.

The primary object of this electrical experiment was to determine the inherent vitality of the offspring of various corn crosses. But it is within the possibility of vision that, in time, the device may have a wide application in determining the vitality of all kinds of seeds. This is a matter apart from the tests of viability, which do not distinguish any more than the life of the embryo and do not protect the propagator from failures on account of the inferior quality of the seeds. Particularly if accompanied by a knowledge of the genetical background, seeds given an electrical test of vitality would be a decided step forward in assuring success, not only in the propagation of seedling crops, but also in the production of plants having the best prospects of survival in the nursery and the garden.

BRACING YOUNG TREES.

When a nurseryman sets out a young tree on a customer's grounds, he frequently braces it by means of guy wires and stakes. There are good ways and bad ways of doing this, but we shall assume that the nurseryman knows his business and that the wires are carefully placed and whatever material he used to bind the tree is such as to cause no abrasion.

However well the job is done, the growth of the tree and the passing of time will require that the bracing material be adjusted or removed. Sometimes this is left to the client, who either forgets or uses poor judgment.

More than one tree expert has been called in to advise what is wrong with a deformed or dying tree, to find that the trouble was started by the guy wires when the tree was planted.

If the nurseryman does not himself remove the bracing on young trees that he plants, he might find it useful to keep a list of the clients' addresses where such trees were set out. Then when a quiet day comes later on, he might go around to take a look at the trees and see if the wires have been removed. He would at least gain considerable good will, and he might avoid later serious complaints.

TOLL ON AGRICULTURE.

Nobody is more conscious than the nurseryman of the toll taken by plant diseases, insects and weeds. These pests are the opponents in a continual battle. Yet the losses to nurserymen are comparatively small when one takes into account the important agricultural crops subject to these enemies.

Just before World War II the federal bureau of entomology and plant quarantine estimated there were 80,000 kinds of insects in North America. Sixty of these alone cost agriculture \$1,600,000 a year, it was estimated. The federal bureau mentioned above was engaged in work with less than 200 last year. How many others of the 80,000 insects are taking unrecognized toll from American agriculture?

The latest estimate is that the United States has 25,000 infectious plant diseases, including 10,000 of known importance. The 500 leading diseases of major crops cost \$2,000,000,000 a year, it is estimated.

Efforts to control weeds by chemical means are just beginning, but there is ample opportunity. United States Chamber of Commerce estimates that weeds cause an annual loss of about \$3,000,000,000 in this country.

In calling attention to the need of accurate surveys of plant disease losses, a committee of the American Phytopathological Society on that subject stated recently that plant diseases annually destroy an estimated twenty per cent of American crops.

Certainly better knowledge of crop losses is needed, not only from plant diseases, but from insect and weeds as well.

MERRILL B. ESTERLINE and H. J. Schnitzius represented the nurserymen of Indianapolis, Ind., on the board of directors for the Indianapolis home show, which was held April 18 to 27. Mr. Esterline served as treasurer of the executive committee, chairman of the finance committee and a member of the general plan and model house and the gardens committees. Mr. Schnitzius was a member of the gardens committee.

Reports on Spring Wholesale Business

Weather of all kinds played havoc with spring digging, shipping and planting, but nevertheless reports indicate a good volume of business was done this spring throughout the

country.

Following a long cold winter in the east and midwest came record rainfall and continued cold weather, while on the west coast the extremely dry weather was cause for concern. The rain made it difficult to get into the fields and nurserymen were far behind in their digging; the cold retarded plant growth and in some sections late frosts and snow damaged fruit tree seedlings. The shortages of labor and packing materials have been somewhat eased, so that this year the weather has been the primary factor with which to cope.

There was a heavy demand for most kinds of stock, particularly for evergreens, but in some sections fruit trees did not move so easily, and it is expected that prices on this material may be slightly lowered.

Predictions for the future are ontimistic, for it is still the consensus that it will be some time before the supply of nursery stock can meet the demand. Even though the public would like to see price reductions in the products of all industries, nurserymen do not see how nursery stock prices can be lowered while the cost of business steadily increases.

California Sales Good.

In addition to commenting on a good season, John Armstrong, vicepresident of Armstrong Nurseries, Ontario, Cal., makes some suggestions for bringing in a good volume of business when stock becomes more

plentiful. He writes:

"I believe that nursery sales in this area were satisfactory during the past season. In many lines they were exceptionally good. While the demand for fruit trees was strong, there was some evidence of small brush piles at the end of the season, something which had not occurred for several years past. Roses were in strong demand and cleaned up well. Ornamentals were and still are quite short in many instances and are likely to continue so for some months to come.

"There was plenty of help available here, and aside from a very dry winter and some local quarantines that hampered us some, conditions were generally favorable.

"As to next year, I think everyone will agree that there will be more of everything to sell, but it should be

another good season. While prices undoubtedly will be reduced here and there because some things may have been too high or because competition will drive them down, still it does not seem that the general price level can go down very much because costs have certainly not decreased as yet. Probably we should realize that we will have to work harder to get business, utilize more efficient methods and improve and maintain the quality of the stock that we supply to our customers. These things I think are more important than price cutting.

More Help Available.

With the labor situation greatly eased, the Monrovia Nursery Co.,



Monrovia, Cal., was able to meet the heavy demand for ornamental trees and shrubs and anticipates another good season when the expected residential building boom gets under way in southern California:

"Demand throughout the past shipping season continued heavy, approximating the same volume averaged during the past five years. Help of all types was obtained more easily than at any time since the beginning of the war. This was because of the wholesale release of workers by the war plants in the immediate area. With this additional help, it was possible to increase production and to add several new varieties to growing lines for the next season.

"The scarcity of railroad cars created some difficulty in shipping. However, in many cases it was possible to use trucks so that all orders were delivered on schedule.

"Because of the expected boom in

residential construction throughout this section of the country, a heavy demand is anticipated next season. It is thought that there will be little change in prices, with the possible exception of a slight downward trend for a few varieties."

Cleanup in Oregon.

Good weather conditions in early spring were a boon to Oregon nurserymen, but a severe drought since the latter part of April is now causing concern, according to Wayne E. McGill, A. McGill & Son, Fairview, Ore., who writes:

"We had one of the most successful seasons in our history. Our cleanup was almost complete, which always makes a nurseryman feel happy. The demand for our line of material was strong, and we could not take care of nearly all the inquiries.

"We had a good winter, as far as the weather was concerned, which enabled us to move our stock out of the field. Our help situation has been satisfactory, and we have been able to locate some good men since the war. They seem inclined to stay, and we are making good nurserymen of

them.

"We finished our shipping and deliveries by March 15 and then had a nice break in the weather so that practically all of our field planting was done by April. Since then conditions have not been too good. We were congratulating ourselves on the good weather we have had since April, enabling us to take care of our weeding and cultivation without interference from the rains that we usually have during the last part of April and first of May, but we have had no rain at all during this time and at present are suffering quite a severe drought. We are fortunate in being able to irrigate some of our plants, and so far nothing is really suffering, but unless we have rain during the month of June, growth on many things will be curtailed. The drought is affecting other crops more seriously. Strawberries, for example, will be only forty to fifty per cent of a crop, because of the dryness, and of course, raspberries will be hard hit if rain does not come.

"We feel there is going to be a strong demand for our line of material during the coming season and from early inquiries feel there is not going to be enough of many items to go around. In general, we believe prices will be quite steady, as there is certainly no decrease in the cost of production and the only reduction in prices that could be considered at all would be on some of the items that took an abnormal rise during extreme shortages."

Surpass Previous Volume.

With volume of business even greater than that of last spring, A. H. Steinmetz, Portland Wholesale Nursery Co., Portland, Ore., looks forward to another good year. He

"Our business for the past season went along in a highly satisfactory manner and ended up twenty per cent ahead of last year in volume. Local stock generally was of good quality, and we had enough experienced help to handle shipments more promptly and more efficiently than during the war days. Stock of all kinds cleaned up well.

"For the coming season this area will again be short of almost all kinds of ornamental nursery stock, and it does not seem likely that there will be much surplus in fruit trees or small

"Prices of ornamental stock for the 1947-48 season are being maintained just at last year's level, while prices on fruit trees are down ten per cent.

"Collections have been satisfactory all season, and advance orders that are coming in from our regular customers give us every reason to believe that the year ahead will compare favorably with the season just closed."

Record Volume in Alabama.

Record volume was reported in spite of the weather and labor shortage by Henry Homer Chase, secretary-treasurer of the Chase Nursery

Co., Chase, Ala., who writes: "We have just completed a record year down here as far as volume is concerned. Looking back on it, we don't see how we got through, because labor is still not plentiful down here and our weather was pretty bad. We avoided handling any B&B evergreens as much as possible and think that was our only salvation, because it did permit us to get through with our shrubs more easily than would have been possible had we undertaken B&B business. We managed to move seventy-one carloads of stock in addition to our LCL and express shipments. All classes of shrubs were in good demand, although at the tail end of the season we found we had quite a little privet left over. Otherwise the cleanup was very satisfac-

"The demand for lining-out evergreens was extremely lively, indicating, to our way of thinking, a big shortage of salable-size evergreens.

"Our own plantings were made rather later than we like to have them, but we have recently been blessed with some pretty good rains and our stands at this point look promising. In our section of the country, as a whole, we think there is probably a shorter supply of shrubs coming on for fall, but there seems to be a big increase in fruit tree plantings, particularly in the Tennessee fruit-growing belts. We think most shrub prices are going to hold about where they were a year ago.

Shortage in Texas.

The limited supply of stock restricted shipping, reports Steve Verhalen, secretary of the Verhalen Nursery Co., Scottsville, Tex., who sees no surplus save in a few items within the next two years. He writes:

This year our season was extended somewhat by the late spring. However, it was probably ended earlier, in spite of the late spring, by our shortage of material. Our fields have been cleaned rather thoroughly of landscape or specimen material and entirely so of salesyard

"The demand this season was so heavy that prices were hardly a factor. However, most prices remained reasonable and the stock moved out constantly fast. Next year, it appears to me, with the shortages foreseen today, prices on the general run of evergreen material will remain high or even increase on particular items. A few items which are easy to grow and grow fast may be in surplus. The only one I can see at present is gardenias. In the deciduous type, probably of the flowering shrubs and quick-growing trees and fruit trees. especially peach and plum, there will be a good supply and probably a decline in prices.

"The rose supply is the most difficult to determine, even though seventy-five miles from us is the largest producing section of the nation. Production has increased, and with all conditions favorable, most likely prices will decrease somewhat, too. However, it will be a minor cut. Probably some producers with good roses will hold the price as it was last season. Good No. 1 plants will probably range from 40 to 50 cents even

in quantity purchases.

"A recent trip through Oklahoma and parts of Texas reveals that considerable planting is being done and that on stock that can be produced in two years an ample supply will be available by that time. However, it is apparent that for the next two years prices will be pretty high and supply limited.

Labor is more readily available. [Continued on page 35.]

NURSERY GARDEN SHOP.

Opened for business March 1. Ralph's Nursery Garden Shop, Kansas City, Kan., has enjoyed a volume of business beyond the expectations of its owner, Ralph Johnston. The new enterprise is located on a corner lot at 2800 State avenue, which is the new U. S. highway 40. On this 130x 130-foot lot Mr. Johnston erected a concrete and stucco building, 20x30 feet, with display windows across the front. At night the building is illuminated by a large neon sign.

Display shelving has been erected along the inside walls, and ten metal tables are also used to display merchandise. Mr. Johnston attempts to offer all kinds of garden supplies in addition to his complete line of nursery stock, which is displayed in bins out of doors. At present most of the sales are cash and carry, but eventually landscape service will be offered.



New Garden Shop Opened in Kansas.

d

A. A. N. Will Visit Arnold Arboretum

By Donald Wyman

The Arnold Arboretum is familiar, more or less, to every nurseryman, yet it might be of interest to give a little detailed information about it so that those who visit it at the time of the seventy-second annual convention of the American Association of Nurserymen at Boston next month will be better prepared to make the most of their visit. It was established in 1872 as a part of Harvard University. The city of Boston owns the land, has built the roads and fences and polices the grounds, but Harvard University operates the arboretum and has full charge of the plantings.

It was the policy during the time of Prof. Charles Sprague Sargent, first director of the Arnold Arboretum, to grow a sample of every woody plant which would survive in cli-mate around Jamaica Plain, Mass., where the arboretum is located. Now with materially limited space, it has become necessary to qualify this to the extent that all woody plants are tried, but some that differ little from others, or those that are only halfhardy, or those that have no ornamental or scientific merit whatsoever, are eventually discarded after full records have been made of their growth at the arboretum during a period of years. Even now there are well over 6,000 different kinds of woody plants growing at the arboretum. There are over 130 maples, nearly 450 lilacs, sixty-seven viburnums and nearly 200 rhododendrons and azaleas, only to mention a very

The list of plants first introduced into the United States is a long one, many of the plants being well known to most nurserymen in this country. Professor Sargent and E. H. Wilson were outstanding in their efforts to locate new plants in distant lands. Such plants as the common Japanese barberry, the evergreen bittersweet, the beautybush, the dove tree and several of the evergreen barberries are only a few of nearly 3,000 different species and varieties introduced into this country by this institution.

New plants came to the arboretum just before the World War II at the rate of approximately 200 a year, and though little was done during the war years, there is still an opportunity in this field. A definite program of plant breeding has been established, so that there are now thousands of seedlings under trial in the nurseries, some of which may well be outstanding introductions later.

The Case estates of the Arnold Arboretum constitute a recent gift of 150 acres in the town of Weston about twelve miles from Jamaica Plain, where most of the young nursery stock is being grown. Here are located some of the horticultural experiments recently set up in an attempt to find out more facts concerning the cultural requirements of ornamental woody plants. The azalea testing garden is being located here, as well as experimental plots for some of the plant-breeding work. All in all, these 150 acres are going to be an excellent testing plot, a material asset for the general work of the arboretum. Many of the botanically necessary but not ornamentally prominent shrubs and trees will eventually be grown here permanently, thus affording more space at Jamaica Plain for valued ornamental specimens.

The great herbarium of 500,000 sheets representing the woody plants from all the temperate regions of the world is located in the administration building immediately inside the Jamaica Plain gate. In this same building is one of the finest libraries in North America of books on woody plants, containing nearly 48,000 volumes, written in thirty-five languages and dialects. Students come here to study from all over the world, for

the opportunities offered in this great herbarium and library are unique indeed.

There are several points of interest on the grounds which might be of interest to visiting nurserymen. First, of course, would be the shrub collection, where nearly 1,000 different shrubs are being grown in long beds, easily separated for study. If time is limited one can see more plants here in a short time than in any other part of the arboretum.

The lindens and horse chestnuts near the Administration building contain most of the types bought and sold in this country so that one can quickly find what a mature plant of a certain species looks like.

Walking past the lilacs and the mock oranges one comes to the viburnum collection, where nearly seventy different types of this serviceable genus are being grown. Not all are worth while from an ornamental standpoint, but nurserymen can well appreciate the advantages and disadvantages of certain species and varieties when they are grown in similar soil and displayed one next to the other, as they are here. The euonymus collection across the road has some interesting specimens that might be of interest to those growing this group of shrubs.

Bussey Hill in mid-July boasts the hardy form of Albizzia julibrissin rosea in full bloom, a plant grown from seeds collected by E. H. Wilson in 1918. The species grown through-

[Concluded on page 43.]



View of the Famous Lilac Path at Arnold Arboretum.

Dr. Donald Wyman is horticulturist at the Arnold Arboretum, Jamaica Plain, Mass.

AMERICAN ASSOCIATION OF NURSERYMEN

RICHARD P. WHITE, EXECUTIVE SECRETARY



636 SOUTHERN BLDG. WASHINGTON, D. C.

IMPORTANT MATTERS BEFORE CONVENTION.

Questions before the board of governors and topics of speakers' addresses at the seventy-second annual convention of the American Association of Nurserymen, to be held at the Hotel Statler, Boston, Mass., July 21 to 24, include some of particular moment to members.

Trade promotion is beginning to assume interest to nurserymen, who look for an end to the sellers' market of the past few years. One of the most important matters to come before the board of governors in openmeeting, where every member will have an opportunity to express himself, will be the report of the market development and publicity committee. This committee will render a complete report on the activities and accomplishments of the Verne Burnett organization from February 1 to July 1, including a summary of the several public opinion polls which are now under way, among industrial plant managers, homeowners, prospective homeowners, realtors and the association membership. On a basis of the findings of these surveys, a program of trade promotion will be proposed for 1947-48, which will be the subject of discussion.

"What Is This Business of Ours?" is a question which will be discussed by M. Truman Fossum, assistant professor of floriculture at Cornell University, who has been making an economic and statistical study of the florists' and nursery business in New York state and the nation.

With A. A. N. cooperation, the American Pomological Society has continued its survey among commercial fruit growers to indicate future demand for fruit varieties. Last year apples and peaches were covered. This year plums, cherries and grapes were considered. An over-all national summary will be presented by John T. Bregger, associate secretary of the American Pomological Society, in charge of variety trend studies.

The secretaries of local, state and regional associations will convene Monday, July 21, for a full day's meeting to discuss association management problems. The purpose of this meeting is to exchange experiences and ideas with the objective of improving the management of local, state and regional associations. Subjects selected for discussion as a result of a poll of secretaries just completed are: State association activities and projects; building meeting programs; legislative activities of state associations, and cooperative activities of state associations with state agencies—department of agriculture, agricultural experiment stations and highway departments. As background material, a survey of membership requirements, financing, current activities and policies of local, state and regional associations is being made, a summary of which will be presented.

The first meeting of the board of governors is scheduled for Monday evening, July 21, to receive standing committee reports, official messages and routine matters. Delegates to the board must be certified to the Washington office at least thirty days prior to the convening of the board, July 21; in other words, by June 21.

Hotel reservations should be made without delay. At the Hotel Statler, 800 rooms have been reserved for occupancy by A. A. N. members. The overflow will be housed in the Copley-Plaza hotel near by.



Solarium Serving as Flower Shop Attached to Salesroom of Burr-Christian Nursery.

BY AIR TO BOSTON.

Boston, scene of the 1947 convention of the American Association of Nurserymen, can be reached by air in a few hours from all eastern and midwest cities and in a little over a half day from west and Gulf coast areas. Probably a considerable number of members will use this mode of travel.

Five of the country's major air lines — United, American, Eastern, Northeast and Trans World—make Boston a terminal on their nation-wide routes. All have flights which arrive and depart at convenient hours. For example, United will speed members to Boston from such key points on its system as Cleveland, Detroit, Chicago, Omaha, Denver, San Francisco, Portland and Seattle. In addition to its present fleet of 4-engined and twin-engined Mainliners, United this summer will be operating its new high-speed 4-engined Mainliner 300's (Douglas DC-6's) from coast to coast.

SOLARIUM FLOWER SHOP.

An attractive solarium, of glass brick and plate-glass construction, has recently been added to the facilities of the Burr-Christian Nursery, owned and operated by Ray Burr and J. Bounds Christian, at Hayward, Cal. The nursery was started in 1944 at its present location, and since then there has been built an attractive salesroom and office in addition to the solarium, which is operated as a flower store. Robert Lucas, formerly manager of the Emporium Flower Shop, San Francisco, is manager.

In the three years since the establishment of the nursery, business has increased regularly each month. The stock of nursery and garden supplies, tools and equipment as well as that of plants in one and 5-gallon containers and in larger sizes is one of the finest and most complete in the immediate area. The firm does a retail business only and grows none of its nursery stock.

Before operating the nursery, Mr. Burr was for many years connected with the nursery business as sales representative for several nursery supply houses in the bay area. Mr. Christian was superintendent of the Hayward schools prior to his association with Mr. Burr, ending twenty years as a teacher in the public schools system. Before that he had been nursery inspector in Butte county, California.

county, California.

Mr. Burr is a director of the local
Rotary Club, a Boy Scout master and
active in all local civic affairs.

Conventions in Southern States

LOUISIANA MEETING.

The official registration count of 406 was a record attendance for the Louisiana State Horticultural Association which met May 18 to 20 at the Hotel Frances, Monroe, La., with florists, seedsmen, nurserymen and allied tradesmen coming from all parts of the state and from most of

the near-by states.

Officers elected to head the association are Henry A. Bernard, New Iberia, president; F. P. Robinson, Bastrop, florists' vice-president; Rene Casadaban, Abita Springs, nursery-men's vice-president; J. Y. Brooks, Monroe, landscape group's vicepresident; V. U. Hunt, Baton Rouge, seedsmen's vice-president; Ed Sanders, Shreveport, allied tradesmen's vice-president; Herbert A. Hecht, New York, field representative; George P. Dupuy, New Orleans, secretary-treasurer. Directors are Clara Robbins Bell, Lafayette; Ray E. Williams, Shreveport, and Tom Reed, New Orleans.

The convention was built around a design school for florists. Other events included a soil and plant clinic under the direction of W. E. Anderson, state entomologist. In a talk on "Ornamental Plants for Louisiana," Prof. I. S. Nelson suggested that a greater variety could be achieved in landscaping by the use of plants introduced in past generations and now out of style. He mentioned several varieties of roses and narcissi which still can be found in old gardens or naturalized that are worth growing in nurseries for landscaping. Of the native trees, shrubs and flowers, he suggested the Louisiana wild irises, cypress trees, dogwoods, azaleas and mountain laurels. If the cypress tree is nursery-grown and fertilized, Professor Nelson said it would make an excellent subject for lawn planting.

The second day of the meeting a visit was made to the Carey Holmes Nursery, West Monroe, to see the camellias, azaleas and other broadleaved evergreens grown under lath. Completing the program, Prof. C. C. Cane spoke on "Soil Fertility and Soil Testing," and A. L. Taylor, of the Shell Chemical Corp., talked on "Soil Fumigation and the Use of D-D." D-D was particularly recommended for the control of nematodes

and wireworms.

Out-of-state guests included the Leonard Riggs, R. Lacy Nursery, Longview, Tex., and the Clark Kidds, Arp Nursery Co., Tyler, Tex.

FLORIDA CONVENTION.

The nurserymen's group held two afternoon sessions when the Florida State Florists' Association met for its twenty-sixth annual convention May 25 to 27 at the Roney-Plaza hotel, Miami Beach.

Elected to head the nurserymen's group for the next year are Calvin D. Kinsman, Kinsman Landscape Co., Miami, president; Frank Stott, Clearwater, vice-president, and Paul Mears, Fort Lauderdale, secretary-treasurer. Outgoing officers are Charles R. Wedding, president, and Jack O. Holmes,

secretary-treasurer.

Dr. John Watkins, of the University of Florida, presented an illustrated discussion on propagation. He emphasized the importance of controlling and manipulating the rooting medium and the environment and pointed out one changing practice, that of leaving considerably more leaf area on cuttings than formerly. In order to do this successfully. it is necessary to control moisture and humidty carefully and to take steps to prevent introduction of disease. He indicated that the addition of some organic material to the sand is frequently beneficial, but here again he cautioned that sterility of the propagating medium is essential. He recommended vermiculite as a rooting medium. Leaf bud cuttings, Dr. Watkins continued, serve a practical purpose. They are particularly useful when it is desirable to work up a large stock of cuttings from a restricted quantity of propagating material.

A report on the soil survey of the Everglades drainage district was made by Dr. R. V. Allison, of the Everglades experiment station, Belle Glade, and he also spoke on plant requirements. The trio of elements required by plants, food, water and air, is no stronger than the presence of any one of them in any amount. Plants vary greatly in their nutrient requirements and in their reaction to nutrients already in the soil. Dr. Allison urged nurserymen to make correct use of plants' environment to promote vigorous, optimum growth. He said soil tests were valuable, but cautioned that kits should be handled and maintained as directed and solutions should be kept fresh.

At the second session, May 27, M. J. Daetwyler, Daetwyler Nurseries, Orlando, spoke on peat. He described the variations in quality of peat, their differences in texture, fertility and reaction. For example, one major purpose in using peat has been to obtain a properly acid soil for azaleas, gardenias and other plants with similar requirements. Mr. Daetwyler cautioned that all peat does not achieve this, as some Florida peat is on the alkaline side, having a pH above 7.

Raw peat, he said, is termed not so satisfactory as that which has been seasoned for three to six months after mining. He also pointed out that the addition of organic fertilizer to peat improves it through increased bacterial action. Although peat is not considered a fertilizer, when mixed with soil it helps to provide a more regular and steady supply of food for

assimilation by plants.

In preparing beds for azaleas and camellias, Mr. Daetwyler explained, a layer of peat is applied over the soil, thus making a raised bed with good drainage. In field planting of azaleas and camellias individual peat pockets are made in the sandy soil and the plants transplanted into these pockets. The cost of providing the peat pockets is more than offset by the ease with which the plants can be transplanted later.

When peat is used alone for potting azaleas or other crops, it is important that the peat never becomes too dry. as it shrinks and leaves a vacant space between the peat and the edge of the pot. It is then difficult to moisten the peat again when water is applied, as it drains too easily down the side of the pot and out of the drain hole.

Mr. Daetwyler said that it is advisable to have peat somewhat moist before it is used for any purpose. It is easier to handle when somewhat moist, and once the peat becomes too dry it is extremely difficult to moisten

George Taber, Glen St. Mary Nurseries, Glen St. Mary, who was elected vice-president of the Florida State Florists' Association, speaking on "The Disposition of Surplus Nursery Stock in a Nursery," advocated ridding the nursery of surplus and overgrown stock rather than carrying it over year after year in hopes of selling it, as the longer stock is kept the more expensive both its maintenance and disposal become and it detracts from the nursery's appearance. Mr. Taber also urged the keeping of a balanced inventory. Twice a year his firm makes a field count which includes all salable plants. This

[Concluded on page 47.]

Prize Designs of Small Home Grounds

The family living in the modern style home specified in the terms of the competition for designs of small home grounds sponsored by the American Nurseryman and the National Landscape Nurserymen's Association was desirous of using the outdoor space around its home as part of its living area, so that the interior and exterior areas had to be fused into one complete unit through the design of the plantings. Each section of the house is connected to its ad-

joining portion of the yard by its own particular type of garden—lawn areas and informal gardens off the bedrooms and living room, picnic facilities and informal plantings off the porch and a vegetable garden off the kitchen.

The house is located on a fairly level lot 60x150 feet, with the house placed no nearer than twenty feet from the street or nearer than ten feet to the side lot lines.

The plan shown on the opposite

page merited an honorary award for its designers, Charles Lowery and Tom Sherlock, San Jose, Cal., whose comments appear below.

Zone 4, for which this plan is intended, embraces portions of twenty states, swinging down the Pacific coast from southern Washington into the southwestern states, through part of Texas, up into parts of Louisiana, Arkansas, Mississippi, Alabama, through Tennessee and Kentucky into the middle Atlantic states.



MODERN STYLE HOUSE, ZONE 4.By CHARLES LOWERY and TOM SHERLOCK, SAN JOSE, CAL.

The orientation of the house was selected as northeast in order that the rooms would receive a maximum of winter sun and the outdoor living area would be protected from most of the cool breezes. This orientation would not be satisfactory in all parts of zone 4.

The lot was divided into the prescribed areas in an attempt to utilize the entire property. Ordinarily, because of our antiquated city codes, there is a wasted space on each side of a house, but in this case the house was so designed that both sides could be utilized. On the southeast side is the service area, which includes a vegetable garden. To the rear of this and separated by a boxwood hedge is the badminton court. It is located at the extremity of the living area in order that the paved terrace may still be used for relaxation and conversation if two groups of people are present. The shuffleboard adjoins the terrace, and it is bounded on the front by the barbecue pit. The pit was located here because it is readily accessible and still out of sight. When not in use, a pit is only attractive because of its memories and it usually becomes a glorified wastebasket.

The planting in the rear yard is quite limited, the

shrubs being medium-size and the trees small. Some fruit is provided, and the terrace is shaded by the olive tree.

A grape stake fence around the property provides a measure of privacy, the grape stakes being used not because of their popularity, but because they seem to be the only available fencing material in the average homeowner's price range.

English ivy and climbing roses are used to provide some greenery and color on the fence. English ivy is also used as a ground cover on the parkway to keep maintenance at a minimum.

No foundation planting is used because the house was well designed and needed nothing hidden. The old adage about tying the house in with the lawn with shrubs makes one wonder how to tie the house in with the shrubs.

Crystal balls, curved benches, birdbaths, plaster ducks peeking out of shrubbery and other gadgets are omitted in order to give the owner a chance to express his own type of humor.

Charles Lowery and Tom Sherlock.



MODIFY WHITE-FRINGED BEETLE QUARANTINE.

Certification requirements have been lifted, effective May 22, on a number of articles regulated by quarantine on account of the whitefringed beetle when these articles have been maintained under conditions that prevent them from becoming infested, and other articles are completely exempt from certification requirements because present conditions within the infested areas eliminate the danger of spreading infestation by such articles. The new instructions also specify the conditions under which soil and similar material may be certified.

The articles totally exempted from certification requirements are not of much consequence to the nursery trade. Among the materials exempt from certification requirements when they are free from soil and when they have not been exposed to infestation or when sanitation practices have been maintained as prescribed or to the satisfaction of the inspector include hay and straw; uncleaned grass, grain and legume seeds; forest products; brick, tile, stone; pipe; implements, machinery, equipment and containers.

Certification is still required for all soil, sand, gravel, clay, peat or mulch, whether moved independently or in connection with or attached to nursery stock, plants or other products; compost, manure, moss and leaf mold; nursery stock; grass sod; plant crowns or roots for propagation; true bulbs, corms, tubers and rhizomes of ornamental plants when freshly harvested or uncured.

Certificates or master permits may be issued for the interstate movement of soil, sand, gravel, clay, peat or muck when taken from a depth of at least two feet below the surface or when entirely free from any surface soil to a depth of two feet. Sand and gravel may be moved interstate when processed or otherwise treated to the satisfaction of the inspector.

GORDON F. JANACEK, Michigan City, Ind., recently started operation of a small nursery and sales grounds.

A MODERN storage and packing shed has been completed by A. N. Cook, at the Little Tree Nursery, Roanoke, Va.

HARRY C. KISTLER has opened a salesyard at Palmerston, Pa., specializing in foundation and ornamental plantings.

AFTER taking veterans' on the job training at Elie Nursery, Wichita, Kan., George R. Baughman is entering the nursery business at Wichita as Baughman's Nursery & Gardens.

DESIGN FOR THE LOWER PART OF ZONE # 4

1-1 PRUNUS CERASUS MORRELLO

2-1 FICUS CARICA KADOTA

3-1 OLEA EUROPEA

4-2 CRATAEGUS CORDATA

5-1 MALUS BACCATA

G-I CAMELLIA ALOHA

7-4 ABELIA GRANDIFLORA

8-38 BUXUS JAPONICA

93 CHOISYA TERNATA

10-1 FUSCHIA MELODY

II-4 LANTANA CAMARA

12-1 NERIUM OLEANDER

13-4 PYRACANTHA DUVALI

14-10 KERRIA JAPONICA

15-1 PLUMBAGO CAPENSIS

161 FICUS REPENS

17-10 HEDERA HELIX -

185 PS CLIMBING ROSE PAUL SCHALET CLIMBER ON PENCE HUNUAL FLOWERS IN SHEUD BEDS

A-BADMINTON COURT

B-LAWN AREA

C VEGETABLE GARDEN

D. CLOTHES LINE

E- SHUFFLE BOARD

F. BARBEQUE PIT

G-ENGLISH IVY G.C.

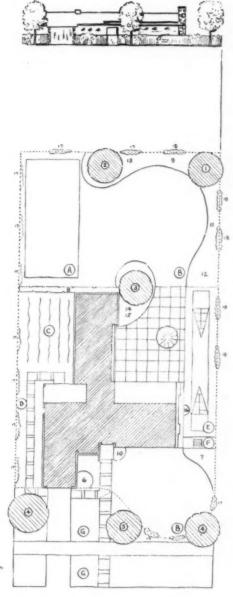
NOTE - PENCE TO DE OF SPLIT REDWOOD STAKES 6:0" MIGH ON SIDES & REAR TO 9:0" FEONT

CONCRETE TO BE FINISHED WITH BROWN COLONWOOD ACCORDING TO HORN CO SPECIFICATIONS

CONCRPTE WHILM TO HAVE OME ROW OF RED BAKKS PLACED EVERY HOUR PEET SCALE







Letters from Readers

CHEMICAL NAMES.

The article entitled "Spray Trade Names" on page 6 of the May 15 number of the American Nurseryman suggests that you may be interested in still another method recently proposed for designating the rapidly growing list of chemicals to which alphabetical combinations are being applied.

The bureau of entomology and plant quarantine of the United States Department of Agriculture has recently been concerned with this problem, which arose in connection with the insecticide (1068), the chemical name of which is: 1, 2, 4, 5, 6, 7, 8, 8-octachloro-4, 7-methano-3a, 4, 7, 7a-tetrahydroindane. A release by the bureau is given below.

"None of these descriptions or designations (1068, et al.) gives sufficient information to designate accurately the product or inform the investigator in regard to its nature. The description and designations are also inadequate for labeling commercial insecticides containing the product to meet the requirements for interstate movement under the insecticide act of 1910.

"At conferences participated in by representatives of the companies producing the product, representatives of the bureau of entomology and plant quarantine and the insecticide division of the production and marketing administration (both of the United States Department of Agriculture) and the food and drug administration of the Federal Security Agency, information was developed as to the nature of the product, including the name of principal chemical constituents. It was agreed that use of the long exact chemical name is impracticable and undesirable. It was also agreed to propose and recommend the use of a short common name as a substitute, which would be defined and registered with the United States Patent Office to preempt its use as a trade-mark name. It was further agreed that the name and definition would be submitted to interested organizations, particularly the American Association of Economic Entomologists, with recommendation that they adopt it as standard.

The name decided on in this case was "Chlordane".

This use of an agreed upon name seems to me a very sensible procedure.

L. R. Tehon.

RATING NURSERY PLACEMENT TRAINING.

The cooperative training program, such as that of Michigan State College, East Lansing, which has been set up to meet the need for trained men to enter the nursery business, is followed with interest by nurserymen throughout the country, and it has even brought comment from Canada.

Norman J. Scott, manager of Brookdale-Kingsway, Ltd., Bowmanville, Ontario, recently wrote to F. L. O'Rourke, coordinator of the nursery and landscape management course at Michigan State College, that it has been hoped for some time that such a program might be instituted in Canada. Similar training programs were started in Europe many years ago and have proved successful. Mr. Scott said that they would rather not have to employ foreign-trained men, but it was too expensive to train others at top wages when they had no practical experience. Said Mr. Scott, "I have been through the mill, having attended college here in Canada and at Ohio State University. To enter into business is pretty rough on a fellow who has not had previous experience. I do believe with such a plan as yours some experience could be gained during the summer months. We suggest that a student be judged on his attitude to his work. We find in business today that the big factor about employees is their attitude toward their work. We always tell a man that if he gives us his heart, we will soon get his hand."

To rate the student employees on placement training in the Michigan program a monthly report is prepared by the student stating the total number of hours worked and designating the hours devoted to specific nursery operations. On the reverse side of this report the employer comments as to the quality and speed of the student's work, his attitude, appearance, difficulty of learning and so forth and gives him an over-all rating.

While the students of the nursery and landscape management course are out working at various nurseries, Mr. O'Rourke keeps in contact with them through monthly counselor's letters, the latest of which announced a special conference for students of the course to be held at the college July 7 and 8

Nearly all selections have been made for the September class, but Mr. O'Rourke states that applications will be accepted for September, 1948, and during the year he will keep in touch with the candidates while they are securing preliminary experience working at nurseries.

DIAMOND JUBILEE ROSE GARDEN.

In celebration of its seventy-fifth year of supplying rosebushes, perennials and other nursery stock to American gardeners, Jackson & Perkins Co., Newark, N. Y., is opening a new 15-acre rose garden in which more than 22,000 rosebushes, including all the most popular varieties, both old and new, will be on display in mass plantings. The new garden will be open from June 15 to October 1.

Each year thousands of persons have come from all over the country to see the millions of rose blooms in the garden and to learn about the care and culture of roses from members of the Jackson & Perkins Co. staff. Throngs of visitors come during the annual Newark rose festival, the sixteenth of which will be held this year from June 19 through July 4. During festival time special events are held in the display gardens of the Jackson & Perkins Co. Nationally known radio programs are broadcast from the stage of the outdoor amphitheater, and demonstration lectures are given on flower arranging. Popular features of the festival include the crowning of a rose queen and the kiddies' costume parade.

NURSERYMEN EXHIBIT AT KANSAS CITY SHOW.

Nurserymen took an active part in the annual Garden Club show, presented May 24 and 25 in the Municipal Auditorium arena, Kansas City, Mo. While the basis of the show was the competition among amateur gardeners in fifty-eight classes, professional nurserymen and florists assisted in the decorations and staged their own displays.

Among the nurseries which entered special gardens and displays were Cloverset Flower Farm; Chandler Landscape & Floral Co.; Everett Asjes, of the Rosehill Flower Gardens; Mohr Bros.; Carl Cordes, of Heart of America Nursery & Landscape Co.; Garden Shop, Inc.; Midwest Flower & Nursery; Williams & Harvey Nurseries; Shawnee Nurseries, and the Blue Ridge Nurseries.

FRED W. SHEILL has changed the name of his nursery at Birmingham, Mich., from Wayside Gardens Nursery to the Sheill Nursery.

New Spray Equipment for Nurserymen

FOG APPLICATOR.

Scientifically designed for efficient utilization of the principles of vaporization and atomization, the Todd insecticidal fog applicator (Tifa) produces a true fog, carrying in it insecticides, fungicides, hormones or repellents which are either soluble or suspendable in water, oil or a like carrier. The insecticide can be dissipated at any particle size desired from the finest of screening fog to a misty spray of 136 microns. One man can operate the compact, selfcontained unit and can select any one of 144 fixed directional settings at the outlet nozzle.

The 700-pound unit, now being produced by the combustion equipment division of the Todd Shipyards Corp., is powered by a small, standard gasoline engine and is suitable for mounting on a small tractor or truck. The insecticide, dissolved or suspended in a carrier liquid, is atomized mechanically by air into a spray. This spray is introduced into a blast of hot air and further fractionized. On contact with the atmosphere, this material becomes a true fog, which disperses quickly over wide areas, covering everything in its path and penetrating the smallest

In addition to providing effective insect control, the machine also applies herbicides and fungicides; makes hormone applications, and is useful in fumigation and deodorization operations.

INSECTICIDE ATOMIZER.

By thoroughly atomizing the insecticide and agitating the foliage, a blower type of insecticide applicator mounted on a 3-ton truck chassis, the Accurate Full Universal insect control unit, is able to deposit a killing dose on the top and bottom of every leaf, stem, twig and branch of a tree, according to the manufacturer, Accurate Tool Co., Newark, N. J. Such thorough coverage insures that all insects and larvae present will be affected by the insecticide, and when certain concentrates are used, a residual deposit to control future arrivals may be obtained.

The unit consists of specially designed airplane-type engine constructed to operate in any position, driving a pusher-type propeller which creates an air blast. The insecticide is received by the blast from an independently operated insecticide supply

system, including a supply tank of 550 gallons capacity; a circulating and feed pump, driven from the truck engine by a power take-off; distributing orifices, and measuring and regulating instruments for determining and regulating the quantity of insecticide sprayed. The capacity of the unit is from one-half to twenty-five measured gallons per minute.

A universal mounting swings the nacelle in a full circle horizontally and from twenty-five degrees below the horizon to vertically upward, operated by remote controls from the operator's cab situated above the truck driver's cab. For full vision, the unit is mounted on a 3-ton truck chassis, equipped with dual tires on the rear wheels, of wide spread to allow operation on soft or uncertain terrain. The spraying capacity is up to two acres per minute on open fields, with the truck moving at five miles per hour. Other types of spraying are, of course, regulated by local conditions. The distance reached is 200 to 400 feet in quiet atmosphere, and up to 700 feet has been reached with favorable winds.

AERO-MIST SPRAYER.

The result of intensive research and skillful designing and engineering, the Lawrence Aero-Mist sprayer is a machine for the application of concentrated insecticides, fungicides and herbicides which have been atomized to fine particles through a controlled and readily directed air current of high velocity. It is a compact unit weighing less than onethird as much as conventional power sprayers and can be mounted on a 3/4-ton platform truck, leaving ample room for materials and supplies. Tested by B. F. Lawrence, of the B. F. Lawrence Tree Expert Co., Greenfield, Mass., the device is being manufactured by the Lawrence Aero-Mist Sprayer Co., Greenfield, of which R. A. Sheals is president.

Easily operated by one man, with all controls at his finger tips, the machine is mounted on a turntable which allows it to be revolved in a circle of 360 degrees by a slight pressure of the operator's foot. The air stream may be directed up and down and to either side.

Through the use of the specially designed Aero-Mist fan operating at 3,600 revolutions per minute, the sprayer shoots a practically invisible mist of concentrate to affected areas

at a speed of 150 miles per hour. A 47-gallon tank carries sufficient spray materials for three to four hours of spraying. The machine is equipped with a pump designed for using oil concentrates or emulsions, but an accessory pump which is adapted to the use of water soluble materials or wettable DDT is available as auxiliary equipment.

Experiments conducted with the mist sprayer have indicated that the elm bark beetle, carrier of the Dutch elm disease, can be killed readily with mist spraying of DDT at the correct season of the year. The mist sprayer gives complete coverage of the largest elms with fine DDT crystals.

PORTABLE MIST BLOWER.

A small, portable mist blower, which gives effective pest control with great savings in labor, materials and time, has been developed by entomologists at the Connecticut agricultural experiment station, New Haven, and the New Haven office of the bureau of entomology and plant quarantine of the United States Department of Agriculture. An adaptation on a small scale of earlier, larger blowers developed at New Haven for use in forest, shade tree and orchard insect control, the new apparatus is equipped to control pests efficiently with extremely small amounts of concentrated insecticides delivered in the form of a finely atomized mist.

By its use, the amount of necessary insecticidal solution can be cut down as much as ninety-nine per cent, it is asserted. Highly toxic insecticides, such as DDT, are broken down into minute particles so that a small quantity of the concentrate will cover a large surface area. The atomization process is brought about by a large volume of air delivered at high velocity by a powerful fan which moves it through a tubular tunnel. The insecticide is delivered at the mouth of the tunnel by specially constructed spray nozzles. The use of air as the carrier instead of water enables the tiny, foglike mist droplets to be carried for long distances.

Easily operated by one man, the blower will apply any insecticide, fungicide or hormone, as well as combinations such as solutions, emulsions and suspensions. It permits the use of formulas which do away with the obnoxious residues often left by spraying with large amounts of or-

dinary spray solutions applied with

conventional apparatus.

The mist blower is currently being manufactured by two firms, Feller-Jones Corp., New York, and Cooley Spray Equipment Works, Somers, Conn., and it is anticipated that a few more firms may go into production soon. As any patent that might be involved would be a public service patent, there are no restrictions on the manufacture of the machine.

The Feller-Jones concentrate mist blower is suitable for mounting on a wheelbarrow and weighs less than 100 pounds. The model manufactured by Cooley Spray Equipment Works is mounted on a wheelbarrow chassis, with controls on each handle, the right handle rotating the blower 200 degrees and the left handle controlling a quick shutoff valve for the liquid line. The unit has a 2½-inch flexible hose and a 2-gallon tank for spray materials.

NEW POSTAL RATES BILL.

The bill, H.R. 2408, on which hearings were held in March and April, for the purpose of increasing postal rates to meet the anticipated deficit of the United States Post Office, and which was reported in detail in the May 1 issue of the American Nurseryman, is now considered dead for all practical purposes, and the House of Representatives committee on post office and civil service has reported a new bill, H.R. 3519, in its stead. Should any bill for increasing the postal rates be considered during the current session of Congress, it would be the new bill. It is a compromise between the current rates and the previously suggested increases, but those who are extensive users of the mails will probably find the new bill no less objec-

The new bill proposes two changes from the current first-class rates: To raise air mail rates from 5 cents to 6 cents per ounce and to create air mail postal card service at 4 cents each. The idea of doubling the rate on regular, postal cards to 2 cents has been abandoned.

In respect to third-class rates, the new bill remains the same as the original one, 2 cents for the first two ounces, plus 1 cent for each additional two ounces. The present rates are 1½ cents for each two ounces. For books, catalogs, seeds, cuttings, bulbs, roots, scions and plants not exceeding eight ounces, the rates now proposed in H. R. 3519 provide for a fifty per cent increase, from 1 cent to 1½ cents for each two ounces,

which is the same proposal as carried in the old bill.

Third-class bulk rates have been compromised. The present rate is 12 cents per pound with a minimum charge of 1 cent per piece. While H.R. 2408 asked an increase to 16 cents per pound with a minimum charge of 11/2 cents per piece, the new bill proposes a rate of 14 cents per pound with a minimum charge of 1 cent per piece. There is an annual fee required to use bulk privileges. On catalogs, seeds, cuttings, bulbs, roots, plants, etc., the proposed rate is 10 cents per pound with a minimum charge of 1 cent per piece, while the current rate is 8 cents per pound and 1 cent per piece. The rate of 12 cents per pound and 11/4 cents per piece was previously proposed.

In fourth-class mail, or parcel post, the rates have also been compromised, particularly with respect to charges for the first pound. The new bill calls for a 2 to 3-cent increase in each of the eight zones, whereas increases of 4 to 5 cents for the first pound were asked before. Rates for additional poundage remain the same for zones local, 5, 6, 7 and 8, but are greater for zones 1, 2, 3 and 4.

For catalogs over eight ounces but less than ten pounds, the rates are the same in each bill, except in zones 1 and 2, representing about a fifty per cent increase in the first pound rate and lesser increases for additional

pounds.

A compromise proposal has also been made in regard to second-class rates, the terms of the first bill having met with such strenuous opposition from newspaper publishers, but the modifications are slight.

COVER ILLUSTRATION.

Rhamnus Cathartica.

Rhamnus cathartica, the common buckthorn, is a well known large shrub, but one that is not now so often recommended for landscape planting as it formerly was. This is, no doubt, because of the fact that it does not have many outstanding characteristics.

The common buckthorn is a native of Europe and Asia, but it has become naturalized in the eastern United States. It is a large shrub or small tree, from ten to fifteen or more feet in height, densely branched, with stiff twigs usually ending in spiny points protruding from between two subopposite buds.

The leaves are borne opposite or subopposite and are about two to two and one-half inches long, toothed, elliptical to ovate in shape, dark green above and somewhat lighter green beneath. The small, greenishyellow flowers are not showy, but the black fruits are attractive during the fall and possess laxative qualities.

Rhamnus cathartica transplants readily, tolerates a wide range of soil conditions and does well in either sun or shade. It requires considerable pruning and is propagated by seeds.

Rhamnus cathartica formerly was used to a considerable extent for hedge purposes. Other plants have now largely replaced it for these uses. Two other species of rhamnus are now more often grown for general landscape planting, Rhamnus davurica and Rhamnus frangula. Another type, which is classified as a synonym of Rhamnus davurica by "Standardized Plant Names," but which is doubtfully typical of it, is carried in the trade as Rhamnus chadwicki. This form is excellent for large hedges or screens and background planting.

L. C. C.

SOUTHWESTERN NEWS.

J. L. Murray, formerly of Garfield, Ark., has sold his holdings there and is now living at Seligman, Mo. For the time being Mr. Murray is out of the nursery business, but he contemplates returning to it.

M. E. Henderson has purchased Waring Nurseries & Flower Shop, Ralston, Okla., and has changed the name to M. E. Henderson Nursery.

Mound Floral Gardens have moved from Mound to Golden City, Mo., and are now operating under the name Waters Greenhouse. Herbert E. Waters and sons are the owners.

At recent lettings held by the state highway commission of Kansas the following were low bidders: Deer Landscape Co., Neodesha, \$755.50, Cherokee county; \$1,833, Chase county; Vyrl Levan, Ness City, \$3,752, Smith county; Cook & Cone, Ottawa, \$2,458, Barton county; Sutton Nurseries & Landscape Co., Independence, \$1,861.75, Cowley county; \$18,615.10, Sedgwick county; Perry Lambert, Hiawatha, \$1,994, Cloud county; \$4,839.45, Ottawa county; A. F. Reis, Topeka, \$20,101.15, Nemaha county.

HEADQUARTERS of the H. R. Potter Nursery have been moved from Madison to Joelton, Tenn., where the nursery's main growing grounds are located. New office, packing and storage buildings are being constructed so that facilities may be expanded.

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Plant Notes Here and There

By C. W. Wood

In a plant family as large as the legumes, which contains over 7,000 species in its different genera, one naturally expects to find much good plant material, and one is not disappointed. Included among the legumes are such well known subjects as the baptisias, galegas, genistas and lathyruses, to point out only a few, and a host of others of equal or greater importance and equally well known. In addition to these, there are many really good plants which are seldom seen in gardens. It is not the purpose at this time to enter into a full discussion of the subject; rather, I should like to point out a few easily grown unusual ones and at least one difficult subject about which there have been several inquiries lately. Let us dispose of the difficult one, Lupinus lyalli, first.

A Few Unusual Legumes.

The genus lupinus has contributed not a little to the pleasure of gardening folks during the past century, mostly in the forms known to horticulturists as L. hybridus. The one that concerns us at the moment, however, has little resemblance to these stalwarts of hardy borders. L. lyalli is a tiny thing, no more than three or four inches high, with silvery leaves nestling near the ground and lovely, bright blue flowers in short racemes. It probably would not endure the hot summers of the south. but of that I cannot speak with authority. In any event it resented the few hot sultry days sometimes experienced in July and August in northern Michigan. But, given filtered sunshine, as through a sparsely-leaved tree, and a well drained soil containing a generous amount of stone chips, the plant seems as permanent as any of the small lupines. It comes quite easily from fresh seeds if they are soaked or if the hard coat is chipped before planting; it does not transplant readily after it has made much growth. In experiments here we grew it in small rose pots until large enough to put in the open.

Although rarely seen in this country, the kidney vetches have long been favorites with European gardeners. In the case of Anthyllis montana, the species that concerns us at the moment, a foil of pretty silvery legume foliage is furnished for rock gardens or borders throughout the open season and culminates in a rather showy exhibition of pink, red

or purplish flowers, according to the variety in use. About the best that I know is A. montana carminea with flowers of pleasing deep rose-red. They are all, so far as I know them, of the easiest possible culture, requiring no more than sunshine in any ordinary garden soil.

Oxytropis and its near relative, aragallus, contain good garden material, especially for the sunny rock garden and dry sterile slopes where little else can be made to grow. Two or three that have been in my trials are rather fussy in their requirements. as, for example, O. halleri, which wants an acid soil and more than the average amount of moisture, but for the most part these plants are easily handled after they are once established. All the ones that I know have long taproots, which probably accounts for the drought resistance of most kinds and certainly accounts for the trouble one has in transplanting them, except in their young or dormant stages. For a start in these interesting legumes, the following easy kinds can be recommended: O. cyanea, five inches tall, violet-colored flowers; O. lamberti (one of the locoweeds of the west), eight to twelve inches tall, flowers from shades of blue through violet to purple and red; O. montana, two inches tall, reddishpurple flowers (will not prosper in an acid soil); O. sulphurea, eight to ten inches tall, light yellow flowers.

Grow them from seeds and handle while young or in deep pots.

A garden could be made a pretty summer picture by the use of restharrows alone. They would not be showy, to be sure, but would be pleasing with their lovely legume foliage and pretty pea flowers in yellow and pinks. Such a collection might well contain the following for a start: Ononis cenisia, two inches tall on trailing branches with light pink and rose flowers; O. fruticosa, a shrubby plant about a foot tall and twice as much across in old specimens, with pink and rose flowers; O. hircina, twelve to eighteen inches tall, with white and rose flowers; O. natrix, about a foot tall, yellow flowers usually showing a fine line of red in the standard. All are easily handled in any light soil, except the lastnamed, which has to have an acid

Colchicum.

It might not be profitable for the average neighborhood nurseryman to include many kinds of meadow saffrons in his growing operations in view of the fact that he can buy most of the popular kinds from specialists. I have often thought, however, for some reasons that will be pointed out later, that two or three of the more unusual kinds would yield a good profit. That is especially true of the single white-flowered form of C. autumnale known as alubum. In the

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first place, it is one of autumn's loveliest flowers, pure white in color (a ghost flower someone has called it), and the flowers are produced more freely than by any other meadow saffron that I know. If you would know how gardeners react to it, have a planting to greet your clients when they come into the nursery next September. But the best part of its behavior from the commercial grower's standpoint is its hearty increase. In fact, the corms multiply so rapidly that they should be divided about every third year to keep them in the blooming mood. Corms at 50 cents each from that rapid increase make money for one, it seems to me.

Generally speaking, colchicums should be given some shade, especially in sections where the summers are hot. Exception to that rule is made in case of the checkered kinds, such as C. aggrippinum, a beauty that has begun to appear in lists again after a long absence. But autumnale and all its forms that I know desire some shade. That, shallow planting (not over two inches deep, I find) and a rich soil, deeply tilled, form the sum of their desires.

Crambe Cordifolia.

Last summer, just when I thought crambes had disappeared from American gardens, I saw a group of C. cordifolia in an Ohio garden. It gives me the urge to mention them as a possible addition to the stock of neighborhood growers who are looking for something unusual.

At least one of the Asiatic crambes that I had years ago was among the boldest plants that I now recall. Unfortunately, it, like many of its relatives, was monocarpic, and that is a rather serious handicap for a plant to overcome among gardeners. The species in question, which I had from a Soviet botanical garden, attained a height of nine feet when it sent up a treelike inflorescence after spending several years in making an immense cluster of basal leaves. It would be a waste of time and space, however, to dwell on these little-known species, for they are seldom available commercially. But it should not be too hard to find seeds of C. cordifolia in European lists, and when found, it will prove to be one of the most unusual plants you are likely to come across in a long time. For instance, if it behaves for you as it did for me, it will make an impressive clump of large heart-shaped leaves during its first two to four years, the lapse of time depending upon factors which I never was able to determine, and

[Continued on page 48.]

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Coming Events

MEETING CALENDAR.

June 17 and 18, American Peony Society, Horticultural Hall, Boston, Mass.

June 19, Oregon Association of Nurserymen, Portland, Ore.

June 19 and 20, National Mail Order Nurserymen's Association, Hotel Sherman, Chicago, Ill.

July 21, National Landscape Nurserymen's Association, Hotel Statler, Boston, Mass.

July 21 to 24, American Association of Nurserymen, Hotel Statler, Boston, Mass. June 26 and 27, Oklahoma Nurserymen's Association, Tulsa.

June 27 and 28, Washington State Nurserymen's Association, University of Washington, Seattle.

August 6, Pennsylvania Nurserymen's Association, Fairview Evergreen Nurseries, Fairview.

August 12 to 14, Virginia Nurserymen's Association, George Mason hotel, Alexandria.

August 13, Connecticut Nurserymen's Association, Lake Compounce.

August 14, Indiana Association of Nurserymen, Ernst Nurseries, Muncie.

August 17 to 19, Virginia Nurserymen's Association, George Mason hotel, Alexandria,

August 18 to 22, National Shade Tree Conference, Hotel Cleveland, Cleveland, O. August 28 and 29, Ohio Nurserymen's

August 28 and 29, Onio Nurserymen's Association, Mansfield-Leland hotel, Mansfield.

September 3 to 5, Texas Association of Nurserymen, Galvez hotel, Galveston.

September 29 to October 1, California Association of Nurserymen, U. S. Grant hotel, San Diego.

October 23 to 25, American Horticultural Council, Hollenden hotel, Cleveland, O.

N. L. N. A. CONTEST PHOTOS TO BE SHOWN AT BOSTON.

Entries in the photo contest for members of the N. L. N. A. are to be exhibited in the Salle Modern, Hotel Statler, Boston, when the association holds an all-day meeting there July 21, preceding the convention of the American Association of Nurserymen. The executive committee of the N. L. N. A. will meet in parlor D on July 20, 22 and 24.

Prize-winners will be selected at the meeting, and cash prizes—\$50 for first, \$25 for second and three prizes of \$10—will be awarded to the best photographs of residential work done by members, such as foundation plantings, gardens, garden details, constructional details, etc. The entries, to consist of not less than five nor more than ten 8x10-inch glossy prints, are to be sent to Mr. and Mrs. Frank White, cochairmen of the N. L. N. A. photo contest, Brockton, Mass., postmarked by midnight July 10.

MAIL ORDER MEN TO MEET.

The annual meeting of the National Mail Order Nurserymen's Association will be held at the Sherman hotel, Chicago, Ill., June 19 and 20.

The program will include the report of the 2-day meeting of the Eastern Region Mail Order Nurserymen's Association, at Philadelphia earlier in the month.

The meeting at Chicago will be devoted entirely to discussions of matter of much importance to the mailorder nursery business, such as available stock in fruit trees, strawberries, small fruits, roses, bulbs and other lines of nursery stock.

Twelve committees have been appointed by the executive committee and are making a thorough check on the supply in their respective lines. This information will be valuable to members in preparing their 1948 catalogs.

OREGON PICNIC.

The Oregon Association of Nurserymen will meet June 19 at Washington park, Portland. Fred Edmunds, curator of the park, will conduct a tour of the international rose test gardens in the afternoon which will be followed by an informal business meeting and a picnic supper.

There will be no meeting at Corvallis this year, and the June 19 picnic will serve as a get-together for the nurserymen of the state with the faculty of the state college and the staff of the bureau of nursery service.

OKLAHOMA DATES.

The Oklahoma Nurserymen's Association will hold its annual summer meeting and frolic at Tulsa, June 26 and 27, according to Max Pfaender, secretary.

There will be a thorough discussion on budwood certification for stone fruits by Prof. K. Starr Chester, of Oklahoma A. & M. College, and Clyde Bowers, state nursery inspector. The Tulsa Nurserymen's Asso-

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PLAN VIRGINIA MEETING.

The annual convention of the Virginia Nurserymen's Association will be held August 17 to 20 at the George Mason hotel, Alexandria, instead of August 12 to 14, as reported in a previous issue.

The program has been planned to include a school for members and their employees. Discussions on subjects such as the maintenance of grounds, selling and landscaping, with emphasis on the last, will be led by experts in each field.

Registration will open the afternoon of August 17, and the evening will be devoted to committee meetings. The following day's program will be devoted to business and organization work in the morning and to a discussion of maintenance in the afternoon. A banquet with entertainment will be the evening attraction.

Tuesday's program will be completely devoted to the study of landscaping. Theory and blackboard discussions will be led by Mr. Tripp and Mr. Hanson, landscape architects from the Washington, D. C., area. In the afternoon they will conduct the group around Washington, D. C., to view some examples of landscaping.

The morning session on August 20 will include talks on the practical problems of nursery stock selling. Officers will be elected and installed following an association luncheon.

Nurserymen from out of the state are invited and should write for reservations to the secretary-treasurer, A. S. Gresham, Jr., R. F. D. No. 9, Box 82, Richmond, Va.

WASHINGTON CONFERENCE.

The Washington State Nurserymen's Association and the Washington chapter 28 of the American Association of Nurserymen will meet at a summer conference on the University of Washington campus, Seattle, June 27 and 28. The conference is being held in cooperation with Washington State College and the University of Washington.

Special features of the conference will be a tour of the University of Washington Arboretum, a banquet at the Hotel Hungerford, a tour of local nurseries and a 4-hour moonlight cruise from Lake Washington through Lake Union and the government locks at Puget sound to Elliott bay and return.

Dr. John H. Hanley, editor in



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chief of "Northwest Gardens and Homes," will serve as chairman for the opening day's program, which will include a talk on "The Science of Soil Nutrition" by Dr. S. C. Van-decaneye; a discussion on "Weed Control Problems in Horticulture and Agriculture"; a movie from the New York Botanical Garden, and talks on "What the Homeowner Desires in Landscape Material" by Prof. O. B. Howell, "What the Fruit Grower Wants in a Variety" by Dr. G. C. Snyder and "Advances in Variety Identification in the Nursery Row" by Dr. T. A. Merrill.

Dean Gordon Markworth, school of forestry, University of Washington, will be the speaker at luncheon. The afternoon session will include a talk, "Controlling Insects in the Nursery," by D. H. Brannon and a talk by Dr. M. R. Harris on "The Extension Pathologist's Role in the Disease Control Problem." A tour of the campus arboretum conducted by B. O. Mulligan, director, will close the afternoon program.

Judge William Long and Alice Sessions will be the speakers at the banquet that evening. Miss Sessions will speak on "Making the Most of Yourself from the Nursery Up," and Judge Long's address will be on "How to Grow Tomatoes." After the banquet, the American Association of Nurserymen chapter will hold its business meeting.

Dr. T. A. Merrill, head of the department of horticulture of Washington State College, Pullman, will serve as chairman for the second day, which will begin with the business meeting of the Washington State Nurserymen's Association. Ray Beam, May Nursery Co., Yakima, will speak on "Cultural Problems Dealing with Nursery Practices," and R. N. Miller will speak on "Machines and Equipment in Horticultural and Nursery Work." There will be a talk on "Seeding and Handling Practices at the Niscually Nursery"; Julius Rosso will speak on "The Florists' Industry in Relation to the Nursery Industry, and Jack Williamson, chief nursery inspector of the Washington state department of agriculture, will also speak.

Other subjects to be discussed at this session are "Virus Diseases, What They Are and How They May Affect the Future of the Nursery Business, by Dr. E. L. Reeves; "The Washington Nursery Improvement Program. by Dr. Earle C. Blodgett, and "The Little Cherry Virus Disease Problem," by Dr. George W. Fischer.

Following luncheon, tours of local nurseries have been planned.

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PLANT TESTING SERVICE OFFERED BY ARBORETUM.

A testing service for new varieties of woody plants has been inaugurated at the Morris Arboretum, Chestnut Hill, Pa. Any nursery or individual may contribute plants for testing and appraisal under Philadelphia conditions, provided realistic limitations are recognized as to the number of seedlings which can be reasonably handled from a given source. The plants are incorporated in display groupings, but they are also subject to close observation for a number of flowering seasons. On agreement with the donors, the plants will not be distributed by the arboretum until specific permission is granted.

Plants contributed during 1946 specifically for testing and appraisal included two new Kurume hybrid azaleas produced by deWilde's Rhodo-Lake Nurseries, Shiloh, N. J.; seven of the new Azalea vuykiana named hybrids, presented by the Vuyk Van Nes Nurseries, Inc., Boskoop, Holland, and a curious natural variant of Rhododendron maximum, from Andorra Nurseries, Inc., Conshohocken, Pa. Other new plant varieties recently contributed for observation are a variety of Castanea mollissima, the Bartlett chestnut, from the Bartlett Tree Expert Co. research laboratory; Ulmus carpinifolia, the Christine Buisman elm, a Dutch elm disease-resistant form, from the United States Department of Agriculture, and the hybrid Rosa rubus and two named hybrids of Prunus incisa x campanulata parentage from Capt. Collingwood Ingram.

OBITUARY.

Philip Lutz, Jr.

Philip Lutz, Jr., of Indianapolis, Ind., owner of the Phil Lutz Peony Farms, Boonville, Ind., which owned and operated nationally known peony farms in southern Indiana, died May 22 at Boonville following a heart attack. He was 58 years old. Mr. Lutz was former attorney general of Indiana.

WESTCROFT GARDENS, Grosse Ile, Mich., held an azalea and rhododendron show last month which attracted several thousand visitors.

CUMBERLAND VALLEY NURSERIES have been established as a partnership at Harlan, Ky., with M. W. Kensinger as manager. He was formerly manager of the North Star Nursery, at Aitkin, Minn.

LINING-OUT **EVERGREENS**

Juniperus Andorra	Per 100	Per 1000
6 to 8 ins. (2½-in. rose pots)	\$20.00	\$175.50
Taxus Cuspidata 2½-in. rose pots, 1-yr		225.00
6 to 8 ins. (cut back from beds)	35.00	325.00
Taxus Cuspidata Browni 2½-in. rose pots, 1-yr.	25.00	225.00
Taxus Cuspidata Intermedia 2½-in. rose pots, 1-yr	25.00	225.00
Taxus Media 2½-in. rose pots, 1-yr		225.00
Taxus Media Andersoni 2½-in. rose pots, l-yr.	25.00	225.00
Taxus Media Hicksi 2½-in. rose pots, l-yr		225.00

All quotations are F.O.B. Milwaukee, subject to stock being sold upon receipt of order. Free packing for cash with order. Please use your printed stationery when requesting wholesale prices.

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Mail want list for prices.

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Priced by height and spread. 18x12 ins. to 24x22
ns. in unlimited quantities. Also large specimens
pt to 5 ft. Write for price list.

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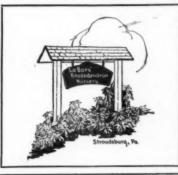
2 to 18 ins., in 2 to 3-inch bands.

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CALIFORNIA ASSOCIATION OF NURSERYMEN

JACK LINCKE, Executive Secretary

215 West Seventh St.,

LOS ANGELES 14, CALIF.

WOULD CHECK LANDSCAPE CONTRACTORS' LICENSES.

Many complaints have been received by Jack Lincke, executive secretary of the California Association of Nurserymen, stating that a considerable number of persons are engaging in landscape contracting without having the required landscape contractors' license. Those of our members who have complied with the law and hold such licenses are of the opinion that anyone doing work for which a license is required should carry one. This is essential to avoid incompetent work by unqualified persons, which, of course, would be a reflection upon the properly qualified firms which are licensed.

At the request of Fred Hammar-strom, of the West Coast Nursery Co., an attempt was made recently by Jack Lincke to obtain a list of the landscapers holding contractors' licenses. It was his intention to publish this list for the members so they not only would know who was properly licensed but also would know who was qualified to receive discounts.

Regrettably, when the subject was taken up with the state registrar of contractors, it was learned that here are 142,000 firms in the state holding contractors' licenses of various types. This considerable list is not broken down by businesses. The licenses are merely listed alphabetically, and the type of business is shown by code. To pick out the licensed landscape contractors would entail examining every one of the 142,000 names to cull out approximately 250 landscape contractors. Nevertheless, the state office would have undertaken this had it been able to devise any means of keeping the list current. However, the state registrar claimed that he could not undertake to furnish the organization with a monthly list of the new licenses as they were issued to all types of business. Consequently, the association's office would have no means of keeping its list current.

Several months ago, this identical problem was presented to the state office by Verne McIntyre, of the San Fernando chapter. When the state secretary conferred with Mr. Zeiss, the local state representative, he was informed that the state did not have

sufficient personnel to police this matter. However, Mr. Zeiss stated that if we would furnish him with a list of the names of those doing work for which a contractors' license was required but who had none, the individual cases would be investigated. He was furnished with such a list.

It is suggested that similar steps be taken by other chapters of the organization in those localities where this subject is a problem.

There is not only the matter, of course, of unfair competition, but

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The CHRYSANTHEMUM CATALOG you cannot afford

to be without. WONDERLAND NURSERIES Ellerson, Va.

also that of the granting of dis-

As a side light on this type of thing it is becoming common practice for persons with large estates to take out a nursery license in order to obtain discounts on their landscaping needs. Building contractors who are putting in large subdivisions are doing the same thing. As a consequence, it is believed that all wholesalers and retailers should tighten up on the granting of discounts, and it is also believed that the entire organization should formulate a uniform policy specifying the amount of discount to be given gardeners, landscapers and others to whom price reductions are customarily made.

Jack Lincke, Sec'y.

300,000 HARDY CHRYSANTHEMUMS Field-grown Divisions

ALGONQUIN, fine, double, showy yel-APOLLO, bronze and yellow, Korean,

tall, good.
ASTRID, clear pink, Korean.
AUTUMN LIGHTS, lovely semidouble

CALIPH, tall, double, deep red.

DEAN KAY, large cushion type, rose-

EMBER, double, showy orange-bronze.
GOBLIN, warm bronze pompon, good cutter.
JEAN TREADWAY, double pink, tall,

good cutter.
KRISTINA, beautiful cerise-red Korean.
MARJORIE MILLS, cushion type, crimson and peach, PIGMY GOLD, cushion type, yellow

pompon.
SIEGFRIED, large, yellow, Korean.
SONNY BOY, bronze-yellow pompon, good for pots.
VIKING, large reddish-bronze, Korean.
WHITE GULL, cushion type, white

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AMERICAN and MOLINE ELM, up to 2-inch caliper.

SOFT MAPLE, up to 2-inch caliper.

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COOPERATIVE EXHIBIT PLANNED FOR STATE FAIR.

Plans are progressing rapidly for the gathering of plant material that will go into the California Association of Nurserymen's elaborate exhibit at the California state fair, to be held at Sacramento August 28 to September 7.

This is the first time that the organization has undertaken an industry-wide cooperative exhibit. It will feature the outstanding specimen material of every leading nursery in the state, according to Charles Armstrong, of Sacramento, president of the association.

Mr. Armstrong recently made a tour of the group's chapters and attended meetings at Los Angeles, San Fernando, San Diego, Inglewood and San Luis Obispo. During the trip, Mr. Armstrong made arrangements with leading growers whose stock will be featured at the fair.

In a recent meeting with Kenneth Fry, supervisor of exhibits, an association committee made up of Charles Armstrong, Elmer Merz and Executive Secretary Jack Lincke spent considerable time discussing the handling and arrangement of exhibit material, which will occupy an area approximately 100x160 feet in a triangular shape just north of the Hall of Flowers.

The exhibit will feature many rare plant items seldom seen outside the state's nurseries, and these will represent the outstanding achievements of many noted California plant breeders.

Mr. Fry has informed the association that \$500 will be available for prize money to the organization. This will not be available to individual exhibitors, but will be paid to the organization, which plans on using the money to defray part of the cost of putting in the exhibit. If another organization should exhibit nursery stock in competition with that of the nursery association, \$400 will be available for a second prize. Mr. Armstrong has compiled a list of more than 100 items of plant materials which he will ask the state's nurseries to supply.

It is believed that much of the stock shipped to Sacramento will be sold in the northern part of the state at the conclusion of the fair.

Assisting Mr. Armstrong on the fair arrangements is a committee made up of the following nurserymen: Tom Edwards, Montebello; John Armstrong, Ontario; Paul Moulder, Glendale; Bert T. Kallman, Santa Barbara; Paul Kleinsorge, North San Diego; Jack McDonnell, Oakland; Syd Whitehorn, Fresno;



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TARLTON NURSERIES

E. J. Morton, Mgr. Route 7, McMinnville, Tenn. Walter Tecklenburg, Lodi; George Roeding, Niles; James Wilson, Millbrae; Jack Evans, Richard Westcott and Paul J. Howard, Los Angeles; W. B. Clarke, Ray Hartman and James F. Clarke, San Jose, and Elmer Merz, Eugene Armstrong, Don Wiese and E. B. Bond, Sacramento.

SUPERIOR CALIFORNIA NURSERYMEN'S MEETING.

Officers and members of the Sacramento Camellia Society were guests of the Superior California Nurserymen's Association at its meeting on May 14, at O'Kane's restaurant, Sacramento. Mr. and Mrs. A. E. Morrison showed colored slides of camellias taken during a trip to the south and also included others of the Sacramento camellia show and scenes in the immediate locality. Peter F. Cruz presided as master of ceremonies. Plans are now being made for a camellia show next March in the Sacramento Memorial Auditorium.

SAN JOAQUIN MEETING.

The May 20 meeting of the San Joaquin Valley Nurserymen's Association was called to order by President Willis Stribling after twentyone members and guests had enjoyed a home-cooked meal at the Good Luck banquet room, Fresno.

President Stribling introduced John Dickson, of the state nursery service, who gave a short talk about the two moving picture films which he showed the group. The first film was about the fumigation of fruits and fruit trees, and the second was about olive parlatoria scale. A question and answer period on the films concluded Mr. Dickson's part of the program.

A motion was unanimously passed that the San Joaquin chapter go on record as favoring a proposed plan to make a film covering general nursery stock, and the secretary was instructed to notify the nursery service to that effect.

President Stribling announced that the chapter had virtually completed its obligation in collecting the assessments due the state office.

Willis A. Stribling was unanimously elected as second director to represent the San Joaquin chapter at state association directors' meetings.

The president urged all members to give serious consideration to suggestions and directives to be presented to directors at the preconvention meeting to be held in September. George Goodhue suggested that a questionnaire regarding this subject be mailed to all members before the

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next meeting, and Mr. Goodhue was appointed to draw up such a questionnaire and send it to the secretary for distribution.

The following committee was appointed by the president to investigate the levying of personal property tax on nursery stock: Elmer Butterfield, Vance Edmonson, Syd Whitehorn, L. E. Ingoldsby, L. P. Sorenson and A. LaMattina.

It was decided to hold the preconvention meeting on the evening of September 10 at a place to be designated at a later date.

Vance V. Edmonson, Sec'y.

REDWOOD EMPIRE ASSOCIATION MEETS.

The forty-fifth meeting of the Redwood Empire Nurserymen's Association was held May 13 at the Bungalow, Santa Rosa, Cal. Twenty-eight members and guests were present for

There was discussion about the annual picnic and barbecue, and it was decided that it be held in June.

President Robert Von Grafen stressed that unless the association gains more members it will be subject to an assessment from the state nurservmen's association. There are now twenty-six members in the Redwood

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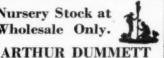
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The underwriting of the Sonoma fair was brought up by Clyde Von Grafen, and premiums, prize money and exhibits were discussed.

While some wanted to set two definite places for the meetings of the association, one in the Marin section and the other in the Sonoma section, it was the consensus that it would be more interesting to eat and meet at different places. Robert Slyter was appointed to find the place for the next meeting and Leo Ihle to arrange for a speaker or other program.

Ernest E. Munson, Sec'y.

LOS ANGELES CHAPTER HOLDS MEETING.

The meeting of the Los Angeles chapter of the California Association of Nurserymen was called to order May 21 by C. Maurice Sawyer, president. The meeting was held at Steven's Nikabob cafe, after an absence of two months from this favorite spot.

Miss Bernice Fay entertained during the meal by playing her accordion. There were several impromptu barber shop quartets and one or two soloists in evidence.

Charles Armstrong, president of the state association, was a guest of the chapter and gave a short speech on the general standing of the association, emphasizing the advances recently made in the state horticultural agencies

Jack Lincke, executive secretary of the state association, and Wray Hiltabrand, of the state bureau of nursery service, also were present. They spoke briefly on business trends and conditions and of the progress of the nursery bureau.

The chapter's first plant forum was held at this meeting and was given a fine send-off by Jack Evans, of Evans & Reeves Nursery, who spoke about orchids, revealing many new facts and predicting that the popularity of growing orchids would soon be on a par with that of growing camellias and azaleas.

John J. Weyler, Sec'y.

ELM QUARANTINE FOR CALIFORNIA.

Following the revocation of the federal Dutch elm disease quarantine No. 71, which became effective May 1, the state of California has issued a notice prohibiting the entry of elms and parts of elm into the state from other states known to be infected with the Dutch elm disease and/or phloem necrosis virus of elm. Pend-

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Taxus in variety, R.C., tr. and pots.
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ing issuance of a formal regulation, entry is prohibited into California effective immediately of elm plants and parts thereof of all species of the genus ulmus, including trees, plants, seeds, leaves, twigs, branches, bark, roots, trunk cuttings and scions of elm; logs or corkwood of elm, and lumber, crates, boxes, barrels, packing cases and other containers manufactured in whole or in part of elm wood not free from bark, originating in or shipped in from the following states: Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Missouri, New Jersey, New York, Ohio, Pennsylvania Tennessee, Vermont, Virginia and West

CALIFORNIA NOTES.

The California Association of Agricultural Commissioners held a 3-day meeting at Riverside, May 20 to 22. Nearly 100 commissioners and some of their assistants attended. A full program of the latest developments in pest control was presented by members of the staffs of the University of California, the California state department of agriculture and the Riverside citrus experiment station. Among the topics discussed were the control of thrips with Bladex, the control of weeds with the newer oil-base herbicides, the control of rodents with the relatively new rodenticide known as 1080 and the use of war surplus ampoules of methylbromide for the fumigation of ground squirrel burrows. It was announced that cooperative experimental soil fumigation tests will be conducted in nurseries by the departments of agricultural engineering, entomology and pathology at the University of California, at Davis, and the staff members of the state department of agriculture, at Sacramento, to demonstrate the possibility of delivering nematode-free and disease-free plants to the public.

Airborne Flower Traffic, Inc., is the name of a new organization incorporated at Redwood City to ship

flowers by air.

L. A. Thatcher has requested permission of the Burlingame planning commission to operate a nursery in an area currently restricted to nonbusiness buildings.

Charles Burr has been in the southern part of the state on a buying trip for the nurseries with which he is associated.

Ernest Birk, of the Espalier Nursery, Belmont, is adding prefabricated lath houses to his garden supply department. These houses are well built, reasonably priced and can be

NURSERY LABELS 25c PACKS

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Pioneer seedling growers on the Pacific Coast since 1914.

Specializing in fruit tree seedlings. Angers Rooted Quince Cuttings, Chinese Elm Seedlings and English Privet.

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It is easy, in an amazingly short time, to root cuttings of Camellias, Acaleas, Gardenias, Roses, Evergreens and other plants, in sand, any time of the year, with our simple instructions.

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Collectors of Tree, Shrub and Wild Flower Seeds

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Fruit Trees
Small Fruits
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and a general assortment of other nursery stock.

Ask us to put your name on our mailing list. (Use your letterhead.)

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NOTICE

Limited production makes it impossible to book orders for new customers.

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Hemet, California

LILY BULBS for Fall Delivery

Our 1947 Trade Price List of Lily and Miscellaneous Bulbs is now available and will be mailed upon request.

Edgar L. Kline, Lily Specialist Lake Grove, Oregon

Order Christmas Trees and Holly now for 1947. Christmas Trees all heights. Douglas, Silver and Silver-tipped Fir. English and French Holly, all good

CORNWELL CHRISTMAS TREE CO. 2185 N.E. 39th Ave. Tel.: TB. 5277 Portland 13, Ore. used by the homeowner as a protected summer house for plants that are injured by direct sun and wind and yet thrive in California temperatures.

Syd Whitehorn, Sierra Nursery & Seed Co., Fresno, left last month for the Feather river area, where he will spend about two months resting and fishing.

R. T. Shunk, manager of the Fresno branch of the California Nursery Co., has been in the southern part of the state on a buying trip for the several branches of his firm. After returning from that trip he spent several days at the firm's main office, at Niles

Walter B. Balch, Shell Chemical Co., San Francisco, has returned from an extended trip through Colo-

T. R. Hansen, of the Seed Store, Fresno, is planning a 2-month vacation in the Lake Tahoe area as soon as his partner, D. Munger, returns. There is a large sign at the back of the Seed Store which reads "The success of your garden next year depends largely on what you do now." This sign is posted each year toward the end of the spring business season, and as a result a large number of inquiries are received and sales of fertilizers and spray materials are greatly increased.

The Smith Nurseries, Long Beach, has been completely renovated during the past few weeks. The operators, Truman H. and Chester L. Smith, report that repairs and painting have brought the appearance of the nursery and the salesroom back to prewar condition and they hope from now on to be able to get help and material to keep it so.

The Park Nursery, Long Beach, is increasing its lath house and green-house space.

The Long Beach Milling Co., Long Beach, recently celebrated fifty years of operation under the same management. Twelve employees have been with the firm for ten years or more, among them Mike Stone, who established the firm's nursery business twenty-two years ago and is still in charge of that branch. Ray Hubbard, who started with the firm twenty-seven years ago, is still in charge of the garden supply department.

Dr. D. R. Hougland is the author of a nontechnical bulletin, "Fertilizer, Soil Analysis and Plant Nutrition," which should be at every nursery. Dr. Houghland is on the staff of the University of California, at Berkeley, and the bulletin may be had by writing for circular No. 367.

The death of John Gehling, long-

ORDER NOW

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Apple Seedlings Pear Seedlings Chinese Elm Seedlings

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Wood Feathers (Baled Red Cedar Shavings) are valuable to use when packing bare roots or deciduous stock for shipment because of their large moisture-absorbing capacity. Will keep roots moist in transit or storage. The most economical of packing materials and the easiest to use.

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BALED SHINGLE TOW

WM. A. JOHNSTON

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SNEED NURSERY COMPANY

P. O. Box 798

Oklahoma City, Okla.

time manager of the Tulare county branch of the Aggeler & Musser Seed Co., was reported in the press recently.

Speakers at a recent meeting of the San Francisco branch of the American Rose Society included Clyde Stocking, Stocking's Rose Nursery, San Jose; Dr. L. M. Massey, who developed the famous Massey dust; Dr. C. V. Covell, Oakland, president of the society, and John Edwards, rosarian from Oakland.

In Australia seemingly successful experiments are being conducted in rain making. The procedure is to shower rain clouds which normally pass over the desert areas with dry ice crystals from airplanes which are flying at an altitude of about 20,000 feet. In one of the recently reported tests, 300 pounds of the crystals produced a heavy shower over an area of about twenty square miles.

Wray Hildebrand, who is in charge of the state nursery inspection service, and Jack Lincke, executive secretary of the California Association of Nurserymen, have met with every chapter of the state nurserymen's association to tell the value of the nursery service and to justify the increase in nursery fees which will soon be put into effect. W. B. B.

SPRAY PROGRAM FOR CHERRY LEAF SPOT.

The more than \$108,000 lost in 1946 by eighteen cherry growers of Berkeley and Jefferson counties in West Virginia from reduced yield caused by poor control of leaf spot in 1945 could have been materially reduced had the growers followed a regular spray program, according to Carlton F. Taylor, of the department of plant pathology and bacteriology, West Virginia University, Morgantown, who reports on a cumulative spray experiment in the February issue of the Mountaineer Grower, official organ of the West Virginia Horticultural Society.

On the basis of a comparison between ten trees treated with limesulphur, ten with Bordeaux mixture. ten with a fixed copper, Copper Hydro, and two untreated trees, it was recommended that growers apply a spray at the petal fall, another two weeks later, another in two weeks, or when normal terminal growth has about ended for the season, and others at less frequent intervals until after harvest. Although lime-sulphur gives good control if applied at not more than 2-week intervals and is recommended for the first two applications when the weather is likely to be cool, the more



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Oregon and Washington-grown Fruit Tree Seedlings

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Wholesale Growers of General Nursery Stock

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Orders will be taken for lining-out and landscape-size ornamentals.

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Many other choice varieties. Good root system our specialty.

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AS ALWAYS— OREGON'S BEST SOURCE of GOOD ROSES

Limited crops reserved for established customers.

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Wholesale Rose Growers
Scappoose, Oregon

retentive copper materials are more effective later. Their greater adherence to the foliage makes them suitable for use where more than two weeks elapse between sprays. Fixed coppers are preferred to a Bordeaux mixture before harvest, since the latter usually causes a reduction of ten per cent or more in fruit size and tonnage. After harvest, Bordeaux mixture is preferred, since it is cheaper and slightly more effective than the fixed coppers and the already processed fruit is safe from the stunting effect.

It was found that trees in the same orchard sprayed with either Bordeaux mixture or with a fixed copper escaped the early loss of leaves. Heavy defoliation on the lime-sulphur sprayed plots, with the resultant renewal of growth during July, was followed by severe killing of the branches during the winter. The leaf-bearing area of the lime-sulphur sprayed trees averaged only fiftynine square feet, as compared with 151 square feet for the coppersprayed trees.

In general, early defoliation was followed by the renewal of vegetative growth in July. Apparently the spray material had no effect other than in controlling leaf spot, thus protecting against defoliation. The remarkable protective effects of both fixed copper and the Bordeaux mixture were amply demonstrated, for the spray plots were of single trees randomly distributed, and trees sprayed with either the copper or the Bordeaux mixture were exposed to millions of spores from other near-by trees.

BAMBOO SEEDS RARE.

Because bamboo seeds are rare, bamboo is usually propagated by dividing old clumps. Flowering and fruiting of clump bamboos rarely occur except in old plants twenty to eighty years after planting; so plantsmen have had little experience in handling the seeds. When in 1945 and again in 1946 there was a good set of seeds on a variety of bamboo at the federal experiment station of the United States Department of Agriculture, Mayaguez, Puerto Rico, David G. White, plant physiologist at the station, tested various ways of storing and planting them and he reports good results from plantings.

Seedlings were transplanted and made a thick hedge the first year. The bamboo seeds resemble those of oats. Dry storage at moderate temperature or in a refrigerator protects germination, but the seeds do not seem to be long-lived and should be

WANT ADS

Help and Situation Wanted and For Sale advertisements.

Diaplay: \$3.00 per inch, each insertion. Liners: 25e line; minimum order \$2.00

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Experienced man for landscape and campus maintenance. Agricultural college. Permanent. Room, board and wages.

P.O. BOX 551-LC Doylestown, Pa.

HELP WANTED

Foreman-salesman wanted immediately by outstanding Massachusetts company engaged in general tree care, large tree moving and planting. Excellent opportunity. Salary and commission. Address Box 495, care of American Nurseryman.

SITUATION WANTED

Horticulturist interested in a position with a progressive establishment where my experience and training will be of value; 35, married. Nursery and botanical garden experience including Kew Gardens, England, and New York. Prefer Calif. or Pac. Northwest. Address Box 496, care of American Nurseryman.

SITUATION WANTED

Man and wife, past 60 years, would like to hear from florist or nurseryman who could provide confortable quarters. We are experienced in propagation, potting and selling. Southern area preferable. A personality that strengthens trade preferable. A personality that strengthens trade SBOX 498, care of American Nurseryman.

FOR SALE—Nursery; 35 miles south of Chicago Loop, on highway 54; approximately 29 acres; variety of trees and shrubs. Address Box 497, care of American Nurseryman.

planted not long after harvest. Mr. White points out that it would be desirable to find ways of stimulating bamboo seed production in younger plants, so that the cheaper method of propagating bamboos by seeds could become more common.

PROMOTED AT SWIFT'S.

A. F. Miller, sales manager of the plant food division of Swift & Co. for the past five years, has been promoted to general manager of the division, C. T. Prindeville, vice-president in charge of plant foods, has announced.

Mr. Miller joined the Swift plant food organization at Chicago as a clerical assistant in 1912. He was placed in charge of Vigoro sales in 1923 and played an important part in early development of that product. In 1932 he assumed the additional duties of supervising sales of Swift's agricultural plant food line and was named general sales manager in 1943. A native of Iowa, Mr. Miller now resides at Western Springs, Ill.

HELP WANTED

Nursery superintendent, a man with several years' experience growing evergreen stock, wanted by a progressive wholesale nursery in midwest state. Must be capable of directing activities of 40 to 50 men and assume charge of production operations. This is an excellent opportunity for an aggressive man. Give full details of past experience, references and salary desired. All replies will be confidential. Address Box 491, care of American Nurseryman.

Representatives WANTED

One of the largest growers of Premium Croft Easter Lilies has several choice territories open for live-wire representatives. If you are now calling on the trade, write to us about adding our nationally advertised Del-CROFT Bulbs and Blooms to your line. Take advantage of the trade's preference for high-profit, superior Croft Lily stock. Top references required.

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AMERICAN BULB GROWERS OF CALIFORNIA

Dept. KK, 12 Geary Street, San Francisco 8, Cal.

Growers of the famous Del-CROFT Lily (Now booking orders for summer bloom and fall bulb deliveries.)

VERN McINTYRE, Toluca Lake Nursery, Burbank, Cal., is now sole owner of the Acme Steel Wire Fence Co.

FIVE miles south of Renton, Wash., in the Seattle vicinity, the retail salesyard of Kent Nursery was recently opened.

L. E. COOKE, sales agent for several southern California growers, has moved into a new building at 110 Vista street, San Gabriel, Cal.

SEASIDE NURSERY & FLO-RAL SHOP, 5460 Mission street, San Francisco, Cal., have been opened by the Cushman family, of Geneva.

D. E. CHRIS JONES, Lulu island, Vancouver, B. C., reports that the nursery business has been exceptionally good so far this season. Prices have more than held their own for good material. Apple trees are the only lagging item. Ornamentals of better quality move well.



Seventy-second Annual Convention

AMERICAN ASSOCIATION OF NURSERYMEN July 21 to 24, Hotel Statler, Boston, Mass.



A. A. N. PRE-CONVENTION NUMBER

AMERICAN NURSERYMAN

July 15, 1947

Full-color plant pictures on four cover pages

Special editorial features for the year's outstanding issue

Annual buyers' guide-record advertising of stock, equipment, supplies

will again make the special number an issue prized by advertisers and subscribers.

EVERY GROWER should take this opportunity of inviting contact with prospective purchasers of nursery stock for fall and spring by keeping his name before the industry.

MANUFACTURERS of EQUIPMENT and SUPPLIES will find it to their advantage to direct attention to their products in this issue at a time when nursery operators are preparing for another busy season ahead.

The extra attention centered in this issue spells increased value for your advertising dollar. You will reach everyone who attends the convention and several thousand other nurserymen through your advertisement in the American Nurseryman. PLAN NOW FOR CONSPICUOUS SPACE and SEND YOUR ADVERTISING COPY EARLY FOR THE BIG SPECIAL NUMBER.

LAST ADVERTISING FORMS WILL CLOSE JUNE 30.

American Nurseryman

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Minimum order, \$2.00.

BULBS and TUBERS

DAY LILIES
Choice Modern Day Lilies
2-year field clumps—Guaranteed true to
name—All bloomed last year, and they are
beauties. Hyperion, Vesta, Patricia, Rajah,
Soudan, Serenade, Mikado, Linda and WauBun, 1 each for \$3.50; 10 each for \$3.0.00. This
is an early summer offer only.
MRS. LEONARD HOWARD
Greenville, S. C.

Plan your classified ad now for the A. A. N. Pre-Convention Issue. Last forms close June 30.

EVERGREENS

JUST ARRIVED FROM HOLLAND HEALTHY, HARDY IMPORTED LINING-OUT STOCK 10 to 5 49, 1 each e

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JOHN VERMEULEN & SON, INC.

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CAMELLIAS, 2½-IN. POTS
Ready for shipment in June. These cannot be too highly recommended as plants that are grown for one purpose only, and that to supply our trade with Camellias that have been grown with exceptional care and attention. We have a good selection to offer, a few of which are listed here. Complete list on request. | No. | No.

We are booking orders for summer and fall on the following varieties of Rooted Evergreen Cuttings: Pfitzer, Hetzi, Andorra. Savin, Irish, Canadian, Excelsa Stricta. Squamata, Meyeri, Scopulorum, Canaerti and Vir. Glauca Junipers; Retinospora Plumosa Aurea; Pyramidal, Globe, Siberian, Gigantea and Geo. Peabody Golden Arborvitaes; Canadensis, Hicksi, Brevifolia and Cuspidata Taxus. Pleased to quote on your complete requirements.

The following for immediate shipment. Retinospora Plumosa Aurea, \$10.00 per 100; \$95.00 per 1000, Andorra Juniper, \$10.00 per 100.

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AZALEA ROOTED CUTTINGS
100,000 Formosa and some other Indian
varieties available for shipment after December 1, \$6.50 per 100, \$60.00 per 1000. No
charge for packing.
FLORIDA NURSERY & LANDSCAPE CO.
P. O. Box 97 Leesburg, Fla.

Write for our list of Azaleas, Rhododendrons and Boxwood.

LEVICK NURSERY CO.

R. F. D. 3 Bridgeton, N. J.

LINING-OUT STOCK
Per 100 Per 1000
Red Jap, Maple, pot gr., grafts 75.00
Andromeda Jap., pot gr., R.C. 25.00
Andromeda Jap., pot gr., R.C. 25.00
Taxus Capidata, 1-yr. bedded. 25.00
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Taxus Hatfieldi, 1-yr. bedded. 15.00
Taxus Hatfieldi, 1-yr. bedded. 17.50
Taxus Hatfieldi, 1-yr. bedded 20.00
Taxus Bervifolia, 1-yr. bedded 20.00
Taxus Bervifolia, 1-yr. bedded 30.00
Taxus Brevifolia, 1-yr. bedded 30.00
Complete list of liners, including Azaleas, Rhododendrons, etc., on demand.
VERKADE'S NURSERIES, Wayne, N. J.

ROOTED CUTTINGS FOR SPRING. Per 100

Taxus media browni\$ 9,00 | 2000 | Taxus media browni | \$ | 2000 | Taxus cuspidata nana | 1 | 1 | 4000 | Taxus cuspidata | capitata | 1 | 2000 | Taxus media hatfieldi | 1 | 1 | 2000 | Taxus media hatfieldi | 1 | 7000 | Taxus cuspidata nigra | Cash with order | Shipped prepaid immediately | SUNNYBROOK FARMS NURSERY | Chesterland, Ohio | Chesterland, Ohio | Chesterland, Ohio | Chesterland | Cash | Chesterland | Cash |

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AZALEA HINO-CRIMSON
Showy, clean, crimson-red, nonfading flower. Large, glossy, dark green foliage. Excellent forcer. A cross between Hinodesiri
and Amoena and hardier than Hinodesiri
and Amoena and hardier than Hinodesiri
ask for color photo, From 24;-in. pots,
\$25.00 per 100; limit, 250. Cash with order.
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Westbury, L. I., N. Y.

LINING-OUT STOCK
Biota Orientalis, 1-yr. seedlings \$ to 6 ins.
Free packing, \$20,00 per 100,
EVERGREEN ACRES
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LINING-OUT STOCK.
Send for list.
LUTHER P. CREASY NURSERIES
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GARDENIA MYSTERY LINERS from 3-inch pots. FLORIDA NURSERY & LAND-SCAPE CO., Box 97, Leesburg, Fla.

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HARDY GRAFTED NUT TREES Crath, Carpathian, English Walnut, Black Walnut, Butternut, Heartnut, Orders for less than 10 not accepted. Price list on request. BERNATH'S NURSERY

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HARDY PLANTS GYPSOPHILA BRISTOL FAIRY

2-in. pots 8.00 2-IN. POTTED STOCK 75.00 Achillea Perry's White \$8.00

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STRATFORD GARDENS, Delaware, Ohio

PHLOX LINERS

\$2.00 per 100: Rheinlander, light salmonpink; Prime Minister, white, red eye; R. P.
Struthers, scarlet; Mrs. Harding, pink,

\$4.00 per 100: Eva Forester (Salmon
Beauty), pink, white eye; Pink Charm, salmon-pink; Hauptmann Koehl, deep red; P. D.
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Delivery now. Packed in bundles of 50.
Minimum of one variety, 50.

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CALIFORNIA'S EXQUISITE FUCHSIAS
Fuchsias: \$12.50 per 100, F.O.B. El Monte,
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plants, pinched, ready to shift. Descriptive list of 75 varieties on request.
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Perennial price list now available.
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ROOTED CUTTINGS OF HARDY MUMS

Aglow, Algonquin, Apricot Glow, Arctic
Queen, Aurora, Autumn Lights, Autumn
Greetings, And Autumn Lights, Autumn
Greetings, And Autumn Lights, Autumn
Greetings, And Lights, Avalanche, Avian, Burna,
Burtens, Betty, Bambi, Bonfire, Boress,
Bronze Cushion, Bronze Pyramid, Burma,
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Chippewa, Champion Cushion, Dahlia Mum,
Dee Dee Ahrens, Dean Kay, Dubonnet, Drifted
Snow, Duluth, Early Harvest, E. A. Guest,
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Helen, Fireglow, Garden Queen, Glacier,
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C. R. Hastings, Monantico, Mrs. Du Pont,
North Star, Olive Longiand, Orchid Spoon,
Pygmy Gold, Pink Radiance, Pipestone, Pink
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Purple Star, Queen Cushion, Red Bank, Red
Gold, Red Hussar, Red Riding Hood, Robert
Willison, Sequola, September Dawn, Sata
Claus, September Bronze, September Sunshine, Sunbeam, Sundance, Sunkist, Sunny
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ROOTED CUTTINOS, \$1.50 per 10.
Allagro, Courageous, Garnet, Glowing
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Alabaster, Alpink, Balcombe Gold, Bronze
Buttercup, Ehonze Freda, Bronze McLeod,
Mine, Gold Standard, Hector, Hillcrest Red,
Leda, Maryland Dome, Mrs. Don Richor,
ROOTED CUTTINOS, \$1.50 per 10.
Alabaster, Alpink, Balcombe Gold, Bronze
Buttercup, Bronze Freda, Bronze McLeod,
Mine, Gold Standard, Hector, Hillcrest Red,
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ROOTED CUTTINOS, \$1.50 per 10.
Alexander Mason, Adoration, Avondale
White, A. E. Cooper, Cyril Coleman, Crusadec, China Gold, Dignity, Do

HARDY CHRYSANTHEMUMS Send for our 1947 catalog.
Cultural notes on cut flowers and pot plants.
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BLEEDING HEARTS
DICENTRA SPECTABILIS, 3 to 5 eye
\$40.00 per 100, DICENTRA EXIMIA, 3 to
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Overplanted on peach pits. Will June bud and grow varieties desired under contract. 2 full acres. Reasonable. If interested, visit or write.
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PEACH PITS, southern-collected; high termination, \$3.00 per bu, Fruit trees, shrubs. RIVERDALE NURSERIES, Riverdale, Ga.

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LILACS, French Hybrids and Standard varieties. One-year grafts, best flowering varieties. \$25.00 per 100, \$225.00 per 1000. DEERFIELD NURSERIES Deerfield Street P. O., N. J.

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FLOWER SEEDS—SOIL HEATING Special stocks of California flower and bulb seeds. General Electric soil heating units. Write. RANSOM SEED CO., San Gabriel, Calif.

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Again available for propagating benches in
the following units complete with soil thermostat, pilot lamp, all-glass thermometer, and
long-life HEATSUM CABLE, the product of
13 yrs', research in our greenhouses.
Unit Sq. Ft. Wattage Voltage Length & Price
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For Stainless Steel instead of glass soil
thermometer with any of the above kits, add
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1539 East 103rd St.

KNOCK-DOWN FLATS

Made from a good grade of Southern Yellow Pine, since Cypress is not available. Standard specifications, inside measurements. 16x12x2\(\) \frac{1}{2} \frac{1}

FINE-SCREENED DOMESTIC PEAT.

FINE-SCREENED DOMESTIC PEAT.
Acid pH 4-8. Some Nitrogen.
Our peat is excellent for lawns, coldframes, perennial seedbeds and preparing
soil for evergreen and shrubbery plantings.

1 to 4 bags. Per 1.00
5 to 24 bags. 1.00
5 to 49 bags. 95
50 to 100 bags. 95
Write for price on bulk carload. We ship
same day order is received. Order early.
Cash, please.

116 S. Jefferson St. Peorla, Ill.

Nature's finest, rich peat humus.

High nitrogen content makes it a "must" for you. Used by leading growers for over 30 years. ECONOMICAL. BE CONVINCED, order HUGE 100-1b, burlap bags today.

2 to 19 bags. \$1.65 each.

Bargain prices on bulk cars, truck loads or bagged cars. Prices F.O.B. Capac, Mich.

AMERICAN SOIL SPONGE SELLING CORP.

ATTRACTIVE REDWOOD TUBS ATTRACTIVE REDWOOD TUBS

Natural finish, excellent for Palms, Camellias and specimen plants, 12-sided tubs, mitered to fit tight, banded with cadmiumplated steel bands. Will ship small order for trial.

\$1.40 20-inch 2.95 L. E. COOKE CO, 110 Vista St. San Gabriel, Calif.

PROFIT WITH PERF-O-RAIN.

Rain when you want it—Low pressure— Rectangular strip watered—No overlap—No sprinkler heads or other gadgets—Portable lightweight pipe—Long life. Write for free folder. W. R. AMES COMPANY OF FLOR-IDA, 3905 E. Broadway, Tampa 5, Florida, or W. R. AMES COMPANY, 150 Hooper St., San Francisco 7, Cal.

SPHAGNUM MOSS Wisconsin's Quality Sphagnum Moss Clean, long-fibered, solidly packed in lapped or wired bales of standard size. None better.

Trucked when feasible, WARRENS MOSS CO., Box 7, Warrens, Wis. GIBRALTER Frost Covers pay for them-selves. Economical, long-lasting, ideal for windbreaks, 6 ft. wide; 50 ft., \$13.75; 100 ft., \$26.00; 150 ft., \$33.90. NEW AMSTERDAM IMPORT, 122 Chambers St., New York 7, N.Y.

BUDDING STRIPS

Best Natural Rubber. All sizes for rosbushes, fruit trees, etc. Quantity price as loas 32c per lb. Free Samples.

THE M. CONLEY CO., Canton 1, Ohlo.

PRINTING
Letterheads, billheads, statements, cards, envelopes, tags, biotters, folders, catalogs, samples. Send copy for estimate.
J. GARLAND HILL, Dept. A, Seaford, Del.

SEED STORE FIXTURES

WALKERBILT

SPRING REPORTS.

[Continued from page 8.]

and we have been able to weed out the poor quality, replacing it with a more responsible type, which means our labor per man is more productive.

Record Rains in Kansas.

One of the wettest seasons on record followed by a cold wave hampered both shipping and planting in its section of the country, according to the Willis Nursery Co., Ottawa, Kan., but did not cause any decrease in demand for stock. Comments from the Willis firm follow:

"We have found that during the past season the general demand for all types of nursery stock has been good. There seemed to be a considerable shift of emphasis to orna-mental stock from fruit trees. We found that fruit was much harder to move, particularly apples.

"The help problem was much easier this year than it had been for the several years past. Our chief difficulty in completing our shipping commitments was the weather, as you probably know. We had one of the worst springs on record in this part of the country as far as rain goes. As a matter of fact, it was the second wettest April on record.

"Plantings all over this section of the country seem to be much heavier than they have been in the past several years. However, none of the growers seem to be plunging particularly on any one item and their plantings are pretty well scattered over the various types of stock. If anything, they seem to be going a little bit heavier toward fruit trees. More fruit is in sight for the coming season, but the ornamental stock situation seems to be about the same as it was for the past season. If anything, the outlook is for a smaller supply. Of course, evergreens are still scarce and it looks as though they will continue to be scarce for two or three more

We have been finishing our planting as well as we can with the adverse weather conditions, but we still have not been able to complete it. We are working at it as fast as we can and hope to be finished shortly. However, that all depends upon the weather. We are still having rains off and on, and at the present time we have a cold wave; of course, that will not slow down our planting, but we do not know whether it will bring us more moisture or not.

"As far as the outlook on prices goes, present indications seem to point toward a slight reduction on prices of fruit trees with those on ornamentals running about the same as they did in the past season.

Peculiar in Iowa.

"Peculiar and unusual" are words used to describe the season by H. J. Deems, vice-president of the Sherman Nursery Co., Charles City, Ia., bringing worries along with the strong demand. He writes:

"Our business this year has been most peculiar, and likewise the weather has been most peculiar and unusual. Now it has reached the point that it is beginning to worry us.

"Business through catalogs was slow to start, and for some time we were considerably behind our volume of a year ago. However, the season was cool and late and the mail-order business gradually picked up and hung on to the extent that it showed improvement. However, I think not enough to overcome the loss. Business through agents and at wholesale was good. All in all our volume is not disappointing.

"Weather conditions have been most unusual. We had snow and frost in the ground until a late date; then we had intermittent snow and rain, since early spring. The ground has never been dry and the excessive rain has brought on a condition in the field that we do not like at all because the weeds continue to grow when we cannot cultivate.

"As for planting. I believe our planting is about as far along this year as last year. We have planted under great hazards, however. May 28 it was snowing.

"We were somewhat worried with regard to labor conditions early in the season. However, we were fortunate in getting Mexican labor.

"Cost of business has certainly risen. Much of the help is inefficient, and our scale of wages is greatly increased. I do not see how prices can be reduced for the coming season, especially so long as the costs of operation and supplies remain up. My opinion would be that there will be no surplus nursery stock in a general way the coming year. However, in all probability during 1949 surplus items will show up throughout the price lists.

"Evergreens will be scarce for some time to come. It has been impossible to buy grafted evergreens. Seeds were hard to obtain; imported seeds almost impossible. The plantings of evergreens were greatly reduced for these and other reasons, and as a result the evergreen business should be good for several years. Many items in evergreens have been just about

BOOKS FOR NURSERYMEN

Propagation of Plants, by M. G. Kains and L. M. McQuesten. Reference book for propagators in greenhouse and nursery. 639 p. (1942) \$3.50

Beginning in the Nursery Business, by John J. Pinney. Operating methods and requirements described for inexperienced. 48 p. (1946).....50c

 Tree Experts' Manual, by Richard R. Fenska. Reference book on diagnosis of tree troubles, fertilizing, transplanting, pruning, surgery, diseases, insects, spray materials, etc.—handy information for daily operations of commercial tree expert. 192 p., 65 illus. (1943)...........\$5.00

The Book of Trees, by A. C. Hottes. Helpful lists for various purposes. Treats transplanting, pruning and propagation. Describes important species. 448 p., 2nd revised edition. (1942) \$3.50

Seeding and Planting in the Practice of Forestry, by James W. Toumey. Third edition revised and enlarged by Clarence F. Korstian. Useful for nurserymen also. 507 p. (1942)..\$5.00

Handbook of Fertilizers, by A. F. Gustafson. Source, composition, effects and application of commercial fertilizers. 172 p. (1944)......\$2.00

Spray Chemicals and Application Equipment, by J. A. McClintock and Wayne B. Fisher. Describes methods of using spray chemicals. Discusses insects and diseases controlled by the specific chemicals and relates methods of improving present pest control practices. Sprayers and dusters now available are described and about 300 illustrations of this equipment are shown. 300 p. (1945)......\$4.00

AMERICAN NURSERYMAN

343 S. Dearborn St., Chicago 4

cleaned up, and until such a time as new stock is grown on to salable size such conditions will exist."

Future Seasons Appear Bright.

Having just completed a volume of spring business meeting all expectations, a prediction that business will continue to be good through the coming fall and spring seasons is made by Harold S. Welch, vice-president of Mount Arbor Nurseries, Shenandoah, Ia., who writes:

"We have enjoyed a fine wholesale business. We had a good cleanup and business was up to our expectations.

"We handle several large mailorder accounts and we would say that their business wound up about even with last year's. We do feel, however, that the weather conditions were such over most of the country this year that some nurserymen have been disappointed in their sales. I understand from eastern nurserymen that they had a much rainier and colder season than we had here in the middle west.

"We have completed our planting. We have had a nice lot of moisture, and as a result, our stands seem good. We do not have an oversupply of nursery stock, just our average, normal supply. Unless something unforeseen should happen, business should



be equally good or better another year.

"Now as to the supply of stock available throughout the country for 1947-48 season. It is our opinion that shortages will soften up a trifle, not too much. There may be a few items, particularly on 1-year crops, such as small fruits, perennials, 1-year peaches, that should be in a more abundant supply. There may be more 1-year light shrubs in the common

varieties, but in the finer varieties of 2 and 3-year-old specimen stock, we feel that there is still a shortage. We also feel that there is a serious shortage facing us on evergreens and shade trees for the next three or four years and maybe even longer. There has been a big demand for both evergreens and shade trees, and during the war years the nurserymen were not able to keep their planting up to normal. It is my opinion that most

nurserymen will enjoy a good fall, 1947, and spring, 1948, business."

Evergreens in Demand.

The heavy demand for evergreens is reflected in the report from the D. Hill Nursery Co., Dundee, Ill. W. I. Smart writes:

W. J. Smart writes:
"This spring started out exactly the same as every other spring. I mean by that, we all wondered if it were possible to get out all of our orders. This is an annual disease which we seem to get every spring.

"This so-called disease was intensified when spring really arrived and every third day it rained, making digging impossible and the opportunity of even getting into the fields a difficult task.

"Orders this spring were more plentiful and the majority of them larger. Demand for lining-out stock was exceedingly heavy, and we received orders from states from which we had not heard for many years. As a result of this, we were out of lining-out material long before the season was over.

"Balled and burlapped evergreens were very much in demand, and some varieties were very short in supply. We shipped more solid cars this year than we have ever done before, including cars to three of the western states.

"I am of the opinion that nursery stock, particularly in the coniferous line, will be scarce for two or three years to come, and I do not foresee any change in prices, either up or down."

Most Unusual Weather.

In Ohio, too, wet and cold weather was the determining factor in filling orders and getting in new plantings, but nevertheless sales were good and new plantings are making a good start, according to Howard N. Scarff, of W. N. Scarff's Sons, New Carlisle, O., who writes:

From the standpoint of weather this has been one of the most unusual spring seasons ever experienced, as far as I can remember. The unsea-sonably cold weather in late March and early April has been followed by almost continual rain. It is now early June, and many farmers in Ohio have not plowed a furrow. Even on the drier soils scarcely a third of the corn has been planted. Many of our landscape customers are just as far behind with their plantings because of the mud and rain. In the nursery we have managed to complete most of our planting between showers, and practically all stock is making a good start

"General sales have been surprisingly good regardless of the adverse



in Greenhouse Wood ...

SLASHES MAINTENANCE EXPENSE Easy to Apply by Dip, Brush or Spray

Now you can add extra life to expensive greenhouse installations . . . substantially reduce your maintenance costs. New, warproved De-K-Pruf gives SAFE, low-cost, long-lasting protection against destructive mildew, mold and borers that infest rich, moist greenhouse soil. One application as much as triples the life of costly woods . . . makes it practical to use less expensive woods for new installations.

Unlike wood treated with old-fashioned preservatives, De-K-Pruf-treated wood will not harm soil or plants. Tests by leading universities have proved it completely safe. De-K-Pruf penetrates deep into wood fibers and will not wash out, or bleach out in sunlight. It is economical to use and easy to apply. One gallon treats approximately 400 square feet of wood. Use for all wood installations and save the money you're spending now on labor and materials for frequent replacements. Order through your supplier. Specify "De-K-Pruf Green for Wood."

IN I AND 5-GALLON CANS; or 55-GAL. DRUMS



UNEXCELLED CHEMICAL CORPORATION 11 Park Place, New York 7, N. Y.

DE - K - PRUF Lastingly Preserves

Coldframes
Hotbeds
Boardwalks
Footings
Benches
Flats
Sheds...
any wood
exposed to
dampness
and decay.

Use "De-K-Pruf Clear for Canvas" to preserve tarpaulins and other fab-

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SAWS

Push stroke, 24-inch-5 point
Pull stroke, 18-inch, pistol grip handle
24-inch, reinforced handle.
16-inch, pole saw blade.
Extra handles for above
and speed saws.

LEATHER SCABBARDS for above saws, speed saws, and others. (Send outline of saw.)

PRUNER HEADS — No. 1 Seymour Smith.

LEATHER HI-TOPS—16-in., E width, 6 to 12 sizes.
TWO-WHEELED ALL-STEEL TRAIL-ERS—Advantages over any other

LEATHER SAFETY SADDLES.

Karl Kuemmerling . Inc.

1021 Renkert Bldg., Canton 2, Ohio

GOODRICH RUBBER BUDDING STRIPS

Prewar quality.

Made from natural rubber.

Eleven sizes available.

Immediate or later delivery.

Samples and prices on request.

WILLIS NURSERY CO.

Ottawa, Kansas

weather. Small fruit plants moved well all through the season. Many varieties were sold out early and all have cleaned up well. Fruit tree sales were not up to normal, but evergreens of good medium landscape sizes moved steadily as fast as weather would permit digging. The total gross volume of business will not be far behind that of the past few years.

At this early date it is difficult to estimate crop prospects for next fall inasmuch as nursery planting is still to be done. It is, however, apparent that there will continue to be a good demand for evergreens in this section with only moderate supplies available. Small fruit plantings have been damaged in some places by heavy rains and the excess of moisture. Most new plantings, however, have made a good start and are looking good.

Taking it as a whole, this has been quite a satisfactory nursery season. We are looking forward to next year with the usual optimism and fortitude, but at the same time with that caution and uncertainty that seem to be the lot of all nurserymen."

Short Season in Virginia.

Virginia winter continued through March and only with much difficulty was a record business handled in the short season, as described below by E. M. Quillen, of Waynesboro Nurseries, Inc., Waynesboro, Va.:

"Our spring shipping season usually starts in early March and continues until the end of May, but the past March was one of our most wintry months, snow covering the ground from the first to the last. Digging and shipping were light and few of our customers would accept delivery, as winter weather prevailed throughout the area we served.

"So our regular spring shipping season did not start until April 1, and we did not finish until May 15. We started with an accumulation of orders and were never able to catch up until near the end of the season. In spite of the late, abbreviated planting season, we handled the largest volume of business we have ever handled, but not without much concern and headache, for at times it looked as if we were never going to be able to move what we had sold.

'We had some increase in ornamental business and considerable increase in small fruits, while the fruit trees for commercial orchard planting about held their own.

We were able this spring to obtain more labor than we have had in the past, but the quality of much of NURSERY HAND TRUCK

This Garden Shop Hand Truck is so well known today that few nurseries are without it. Many have several, use one on each delivery truck, others in the nursery. Material shortages have slowed our production, but we are shipping as quickly as possible. Early orders are suggested, as we ship in same order that we receive orders, and demand for nursery equipment is great because of the rapid expansion of the nursery business.

SPECIFICATIONS

Equipped with Jumbo Balloon Tires and Tubes, 12x4 Inches. Specially Designed Curved Nose, All-Steel Construction, electrically welded. Weight 56 pounds. Over-all Length 63 Inches, Over-all Width 27½ inches, Capacity 28-in. Ball weighing 600 pounds



Pat. No. 110110

Write us for descriptive literature and prices

THE GARDEN SHOP, Inc. 4819 Mission Road

Kansas City 3, Kans.

AS COMPLETE A STOCK OF NURSERY TWINES AS CAN BE FOUND ANYWHERE

440 NO. WELLS STREET . CHICAGO 54

the labor is poor and labor is costing us more than ever before. We are now beginning to cull out some of the least desirable, but are still using labor which we would not use if we could do better.

"The growing season here this spring has been poor. Cold weather continued throughout the spring until late April and early May. We had some warm days, which were followed by a freeze May 10, wiping out a large percentage of the fruit crop in Virginia and destroying a quarter of a million young peach and cherry trees in the nursery, as well as damaging many other kinds of

nursery stock. We lost a large percentage of our peach seedlings. So our peach and cherry will be limited for the next two years.

"Since May 1 we have had a little rain and we fear heavy losses on nursery stock which was lined out this spring.

"The demand for stock continues good. However, we predict that the partial loss of the fruit crop in Virginia will affect the demand for trees for commercial orchard planting."

Backward in New Jersey.

The late spring and frequent rains interfered with the large volume of

formula for a rose-y future



-CLOTRACIDE

REG: U. S. PAY. OFF

ROSE SPRAY POWDER

. . . the rose spray developed BY a nurseryman for use in protecting his own roses. So eminently successful that it now is sold by large and progressive dealers throughout the country, CLOTRACIDE contains all the necessary chemicals for the control of Black Spot, Mildew and other fungus diseases, as well as leaf-eating worms and insects, such as rose slugs, which skeletonize foliage. Easy to use—just add water. Complete instructions on each package.

AVAILABLE IN 3 SIZES

50c size costs you 30c—\$3.60 per case, to sell for *\$6.00. 50c size makes 5 gallons spray.

85c size costs you 51c—\$6.12 per case, to sell for *\$10.40. 85c size makes 10 gallons spray.

\$1.50 size costs you 90c—\$10.80 per case, to sell for *\$18.00. \$1.50 size makes 20 gallons spray. *Suggested selling prices.

Packed 1 dozen packages to a case, F. O. B.
Kansas City.
Send for Sample!

Send 25c (to cover cost of packing and mailing) for 50c size of CLOTRACIDE.

WHOLESALERS! inquiries invited

A FINE PROFIT FOR YOU:

Sell Clotracide to every one of your rose customers—it's a highly profitable tie-in item. Clotracide's low price per gallon and attractive new package make a fast turnover for you.

CLOVERSET FLOWER FARM

ERNEST HAYSLER & SON

105th Street and Broadway, Kansas City 5, Mo.

orders booked, writes William Flemer, Jr., president of the Princeton Nurseries, Princeton, N. J. He states:

"Spring was very backward this year. The frost, which usually comes out in our soil early in March, did not leave us until late in the month, so that our early digging was from two to three weeks behind normal. Then we had repeated severe rains, and by actual count, on eighteen of the twenty-eight working days in April it either rained heavily or the ground was so wet we could not dig.

"This, naturally, delayed completing orders. However, we were fortunate in having made considerable advance preparation during the fall, which, along with a good crew of men, helped us to give reasonable service, and although we were not at all satisfied ourselves, our customers, by and large, understood the difficulties, and we only had one or two cancellations.

"Here, at Princeton, we have been anticipating the increased demand for good nursery stock and have been producing large quantities of young material in the more desirable varieties."

A large greenhouse range with many sash frames and irrigated lath houses affords ample propagating space. Portable irrigation equipment,

BUDDING STRIPS

NURSERYMEN IMPORTANT

The factory has just advised us that it has discontinued making Budding Strips for the balance of 1947.

We have a fair stock on hand now, but if you wait to order your strips until late July or August you may not be able to obtain 100% Natural Rubber Strips.

If you have not received our 1947 price list, send for same.

THOMAS B. MEEHAN CO.

Dresher, Pa.

PERFECTION MARKERS



For Garden, Nursery, Greenhouse or Display.

Pure Aluminum cards furnished which may be changed or used for permanent identification.

Write for complete information.

S-W SUPPLY CO...

Girard, Kan.

TREE WOUND DRESSING



For destroying and preventing the growth of wood destroying fungi and for the protection of wounds, use Bartlett Tree Paint, Easily applied with ordi-

Per Gal Used by Tre Experts, State Highway Depart ments and Pub.

BARTLETT MFG. CO. 3058 E. Grand Blvd., Detroit, Mich. plus a privately owned city water supply, makes many of Princeton's 1,200 acres easily watered.

William Flemer, Jr., president, started the nursery with his father, William Flemer, Sr., in the fall of 1913 and has been in charge of the operation continuously since that time except for two years spent with the A E.F. in France during World

In January, 1947, George S. Harris, formerly of Manchester, Conn., joined the Princeton organization. He has been active for years in nursery sales, and his addition to the organization will permit Mr. Flemer to give more time to production.

MICHIGAN PIONEER DAYS TOLD BY E. H. REYNOLDS.

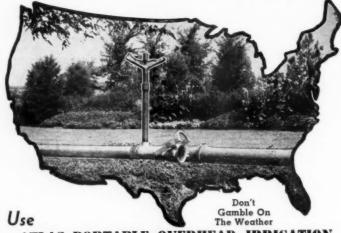
Of special interest in the year that the nursery firm of I. E. Ilgenfritz' Sons Co., Monroe, Mich., is celebrating its centennial year, the Observer's column in the Monroe Evening News recently carried an account of some length written by E. H. Reynolds, who planted many of Monroe's elm trees and was an important figure in the nursery business more than 100 years ago, as will be seen.

Born March 12, 1819, in the town of Bovina, Delaware county, New York, E. H. Reynolds left for the west at an early age, as did so many in those days. The description of his trip westward in 1840, by stagecoach, steamboat and horse-drawn railroad car, formed an interesting introduction to his tale. He yielded to the persuasion to teach school at \$18 a month soon after his arrival at Monroe, Mich., but found three months of it the hardest work he had

His natural interest in trees, shrubs and plants found an outlet soon after when, in 1841, he was engaged by William White, founder of Newport, Mich., to care for his small nursery and greenhouse in exchange for a salary of \$8 a month. After a year's successful experience, Mr. Reynolds decided to go into the nursery business for himself, and in the spring of 1842 he bought a half interest in a nursery at Monroe along the River Raisin, owned by Hartwell & Bisbee. Having purchased Mr. Bisbee's interest for about \$800, he and Mr. Hartwell were partners for about two years, until Mr. Reynolds bought Mr. Hartwell's interest in turn.

Mr. Reynold's partnership with I. E. Ilgenfritz, which was organized about 1846, was terminated by mutual consent a few years later, with

For Healthier Plants, Fuller Foliage, Blooms and Berries



ATLAS PORTABLE OVERHEAD IRRIGATION

To insure healthier plants, normal even growth, reaching marketable size earlier, American nurserymen are installing Atlas Portable Overhead size earner, American nurserymen are installing Atlas Portable Overhead Irrigation Systems. Atlas pipe is equipped with the flexible, leakproof, Horseshoe Latch Couplings. Its light weight, quick assembly and easy portability make it ideal, inexpensive and profitable.

Write for literature and prices. Attractive territories open for dealers.

Manufactured and Distributed by

ATLAS SUPPLY DIVISION

Jones & Laughlin Supply Company
Muskogee, Oklahoma 425 North Main Street



makes fibrous roots, healthy stock.

SELL IT TO YOUR CUSTOMERS - Saves thousands of dollars in replacements. Brings repeat business in both stock and Ra-pid-gro from satisfied customers. A real good-will ambassador.

FEED IT TO YOUR STOCK — Feed your stock while it is growing. Produces stock that will live when transplanted. Ra-pid-gro is economical, only twenty pounds to the acre.

IMMEDIATE RESULTS... DOUBLES GROWTH ON BUDS Write for discounts to the trade.

RA · PID · GRO Corporation - - Dansville, N. Y.

Mr. Ilgenfritz retaining the name of the Monroe Nursery, now celebrating its one hundredth anniversary under the operation of I. E. Ilgenfritz' Sons Co. E. H. Reynolds took the name of the Monroe City Nursery and established three branches, at Berlin, Wis.; Ottawa, Ill., and Niles, Mich., which proved unsuccessful because of unsatisfactory weather conditions and inexperienced labor.

FEEDING ALL

Becoming convinced of the necessity of concentrating his efforts and of the adaptability of the soil and cli-

mate in and around Monroe for nursery stock, Mr. Reynolds formed a partnership with S. B. Lewis about 1862 and purchased two adjoining farms for nursery purposes. George Lewis was taken in as another partner some time later, and the three did business together for twelve or thirteen years, until George Lewis withdrew from the company. After S. B. Lewis and Mr. Reynolds later dissolved their partnership by mutual consent, Mr. Lewis took the name of the Floral City Nursery and Mr.

No. M-452 3 for ... Dozen . No. L-313-Each\$1.50 SHEARS-Utility 1 plain, 1 serrated blade, No. M-458—8 ins. long Each

KNIVES-Straight Wood Handle SPADING FORKS-Heavy-duty

4 angular tines, 11 ins. long—Steel No. L-213—wt., 4 lbs. D handle ach \$2.25

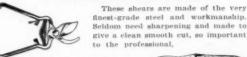
GRASS SHEARS Famous KLIPPER

NIPPERS-Short Blade Snips

One of the handiest and most useful tools ever offered for workroom, greenhouse, nursery, gardener, land-scaper and at home. No. T-122-(7 ins. over-all) Each \$1.50

....\$ 1.75 5.10 19.80

PRUNING SHEARS-Professional



finest-grade steel and workmanship. Seldom need sharpening and made to give a clean smooth cut, so important to the professional.

No. T-123—(Medium size 7-in.) Each \$3.25 No. T-124—(Heavy-duty 7¹/₂-in.) Each \$3.95



WILMETTE, ILL.

FLORIST SUPPLY COMPANY PHONE: WILMETTE 4040 1143 GREENLEAF AVE.

MENTION THE AMERICAN NURSERYMAN

"RLACK LEAF 40"

				-	-	-	-														
No. I-35-1 oz., c	ase	2 doz																		. 8	5.55
No. 1-36-5 oz., c	ase	1 doz		*				×						*	. 1	0. 5	*	*	* 1		8.55
No. I-37-1-1b. ca	ans,	each						*	* 1		8 9			*	6 1	.,		*	* 1		2.42
No. I-38-2-1b, ca	ins.	each		*						 *			0.5	9.	8.						3.92
No. 1-39-5-1b. ca	ans.	each	. ×	×			8 X	*	* 1	 *				×	× 1	. ,					7.40
No. I-40-10-1b. c	ans.	each.														. ,					12.85

DDT Spray 25%-"DETEX"

	All	active	ingredient	s. 1	Vege	etable	oil	base	e.		
No	. I-63-Qua	rt cans	s, each							8	2,98
No	. I-64-1-ga	1. cans	s. each								10.00
No	. I-65-5-ga	I, cans	, each								45,00

ARSENATE of LEAD-"Acme"

No. I-26-4-1b.	oags	 Each \$1.25
No. I-26C-case	of 12 4-1b bags	 11.95

BORDEAUX MIXTURE

No. I-28-4-1b.	bags .			8 0.95
No. 1-28C—case	of 12	4-1b.	bags	10.56

SULPHUR-Wettable

No. I-363-4-1b.	bags	 \$0,60
No. 1-364-50-1b	bags	 4.50

SHOVELS ROUND POINT

-Heavy-duty-Finest-quality Steel. No. L-202-D handle No. L-203-Long 41/2-ft. handle.



SOIL SHOVELS

-Greenhouse Special-





Reynolds continued in business as the Reynolds Nursery.

Some years later, Mr. Reynolds put all his interests into a stock company, organizing under the name of the Michigan Nursery Co. Soon after he disposed of his entire interest in the company, of which David Winkworth is now manager.

CATALOGS RECEIVED.

Hillsdale Landscape Co., Indianapolis, Ind.-Wholesale price list of general nursery stock; 8 pages and covers, $5\frac{1}{2}x8\frac{1}{2}$ inches. Retail catalog: 26 pages and covers, 6x9 inches.

Doty & Doerner, Inc., Portland, Ore.-Fall wholesale price list of general nursery stock, 20 pages and covers, 81/2x11 inches.

NEWBURYLANDSCAPE SERVICE has been started at 2060 Brady avenue, Flint, Mich., by Floyd V. Newbury.

DESIGNER, producer and marketer of electric sprayers for liquid insecticides, Sprayer Corp. of America has announced a change in address from 1812 West Winona street, Chicago, Ill., to 1712 Payne street, Evanston, Ill. The larger quarters at the Evanston address will enable the company to extend its facilities and improve its services.

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the PERFECTRIM TREE SHAPER. A guiding tool for shaping Evergreen Trees and Hedges. With this Shaper Instantly con verted from anyone can trim an Evergreen Tree in 10 minutes or less without pre-Shaper Tree to Hedge Shaper Folds vious experience. Simply place Shaper under tree with fork to hang on wall against tree trunk and rotate for easy storage. it around tree with you foot leaving both hands All Steel, Precision free to operate shears or other cutting implebuilt of telescoping tubing. Plated for lifement. Eliminates need time use. Weighs & lbs. Unconditionally Guaranteed. Every owner a happy user. Immediate delivery from stock. \$15.00 prepaid anywhere for trees up in the U.S.A



TREES THIS NEW EASY WAY

or strings, stakes and long distance sighting. Adjustable any size or shape 10 feet tall.



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Use 1 part with 25 to 40 parts of water

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2 ½-inch pots ... \$2.75 \$5.00
Write for literature and prices on our full line of Agricultural Chemicals.

Dealers wanted.

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New Methods of Propagation

By F. L. O'Rourke

Successful propagation of plants by seeds or by cuttings is dependent upon near optimum conditions of the external factors of temperature, moisture and oxygen and of the internal factors contained within the plant part, which may be designated as nutritive, hormonal or both. At the present time, when skilled and dependable labor is difficult to obtain, methods must be devised to obtain good results in spite of neglect and careless handling. New media for germinating seeds include sand, shredded sphagnum moss and a medium-fine grade of vermiculite, an expanded mica, often sold as concrete aggregate. A teaspoonful or two of a complete fertilizer in a gallon of water can be used to feed the newly germinated seedlings, which can either be pushed along or held back according to the frequency of feeding. Shredded sphagnum moss, as outlined in United States Department of Agriculture leaflet 243, also prevents damping-off fungi from attacking seedlings.

Shredded sphagnum moss is also ideal for potting newly rooted cuttings. The amount of air space and the water-holding capacity of sphagnum stimulate root growth. These potted plants may be fed the same nutrient solution as seedlings, although it is usually advisable to add additional nitrogen for fast growth.

The coarser grade of vermiculite, known as home insulation or housefull grade, has proved to be an ideal medium for the cutting bench. All but the most extreme of the acid loving type of plants root to perfection in this medium, whose abundant pore spaces provide maximum capacity for retaining both water and air. Careless workmen cannot harm cuttings by overwatering vermiculite, as it has ideal drainage. On the other hand, it dries out very slowly and may save cuttings in case of neglect in watering.

Cuttings root best when a large leaf area is maintained on the cuttings, but this requires humidification. Several methods of humidification may be used, such as jet sprayers against a baffle in an ordinary water line, compressed air-water systems and mechanical humidifiers. Another method is the use of an underground chamber or other opaque structure where the air may be maintained at high humidity and the cuttings rooted under fluorescent lamps.

An experiment carried out by Spencer Chase, of the Tennessee Valley Authority, has shown that in producing black walnut seedlings for understock purposes, large-size kernels produce large-size seedlings; shallow-planted nuts (one to two inches) produce larger trees than deep-planted nuts (three to four inches), and adequately thinned or spaced seedlings (six to seven inches) produce larger trees than those grown closer together.

Some poor results with cuttings, even under ideal environmental conditions, may be due to physiological deficiencies. Cuttings of blueberry taken from whips containing blossom buds rooted much more poorly than those from whips bearing only leaf buds. Experiments in Puerto Rico showed that the rooting of a hibiscus

variety which is difficult to propagate was greatly increased when a shoot of a variety which is easy to root was grafted upon it. The reasons for these physiological differences in wood type and variety cannot be adequately explained at present, nor can methods be suggested to overcome all the deficiencies.

FEATURED IN CORONET.

The discovery of the Delicious apple is one of several stories related in an article entitled "Fortunes in Fruit" in the May issue of Coronet magazine, which tells of the nationwide search by Stark Bros. Nurseries & Orchards Co., at Louisiana, Mo., for new fruit varieties.

Begun in 1816, when James Stark came to Missouri and established an orchard on his homestead, the present-day nurseries are run by the fourth and fifth generations—Lloyd, Clay, Edwin, Paul, Lawrence, John and Paul Stark, Jr., and James S. Logan—on the site of the original Stark homestead.

AUTOMOTIVE TREE MOVERS



The above is a picture of one of our 7-foot Rocker Type Tree Movers, owned and operated by the Laur Shade Tree Service, St. Louis, Mo. The tree is a large sugar maple weighing slightly more than five tons. This is the third mover purchased from us by this company.

On short hauls it is possible to move five or six big trees within a day's time. We can use this mover as α crane to load trailers or other trucks for longer hauls.

Place your order early so that you will not be disappointed as all steel stocks are scarce and our production is limited. Write for further information.

WILLIAMS & HARVEY NURSERIES

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Kansas City 2, Mo.

Paper presented at the winter meeting of the Indiana Association of Nurserymen by F. L. O'Rourke, coordinator of nursery and landscape management in the department of horticulture at Michigan State College, East Lansing.

ARNOLD ARBORETUM.

[Concluded from page 9.]

out the south is not hardy in New England, but this variety seems to do well except in the most severe winters. Seedlings grown from its seeds may be rather difficult to establish, but once they are on their way they give continual bloom from July to early September, a time when few woody shrubs have flowers.

Another Arnold Arboretum introduction is the Korean azalea (Rhododendron yedoense poukhanense) on Bussey Hill, introduced by the arboretum from Korea at the turn of the century. Many unusual Ghent azaleas are here also. Quickly moving on down the hill one comes to the plantings along the Centre street path where some of the slightly tender plants are grown, including the hornbeam collection and the aging yew collection. Rhododendrons and laurels are at the base of Hemlock Hill, the top of which was almost completely denuded by the hurricane of 1938. Hemlocks, formerly doing well here, have been dying ever since. The large crab apple collection of nearly 200 species and varieties is at the base of Peter's Hill.

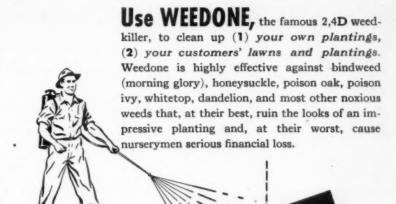
Propagation and experimental units are on the Bussey grounds just above the Forest Hills entrance. There are many interesting things to see here, many new varieties in the process of growing up, a collection of Japanese dwarfed trees and a hedge plantation of 115 different kinds of hedges. An interesting medicinal garden operated by the Massachusetts College of Pharmacy is also located here, as well as a collection of thirty-five different wistarias.

These are only a few points of interest. Many nurserymen will want to spend some time in observing the collections and possibly in visiting the library and herbarium. All staff members will be available during the A. A. N. convention week and will be glad to help the visiting nurserymen in any way they can.

LOUIS FINKEL is establishing Finkel's Nurseries at 351 North Highland avenue, Merion, Pa.

FORMERLY with Kramer & Co., Inc., Evanston, Ill., Anthony J. Kramer is president of a new company, Landscape Associates, Inc., at Evanston.

COMBINING service station facilities with a nursery, Walter M., Marietta and Dorothy Lowe have established Lowe's Service Station & Nursery, at Lakewood, N. Y.



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WARNING: Weedone does not kill grass, but it kills or injures 'most everything else. Use it in a greenhouse only when all plants are removed. Use it outdoors near valuable shrubs and trees only on windless days when you can control the drift of the spray.

- It wets more
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- It penetrates and kills right out to the root tips.

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An invention that protects your shrubbery from the menace of destructive corrosive action caused by dags. Makes the dag's visit so uncomfortable that he keeps away, yet it is so constructed that it will not harm the dag. The SHRUB-GARD is a unit of steel spring wires that are flexible and will not tear clothing of passersby. Each SHRUB-GARD has three prongs and covers approximately two and one half lineal feet.

Harmless to dogs or humans.
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CLEAN-ODORLESS-SOLUBLE-POWDER

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TYSE HYPONEX for top-dressing seedlings, cuttings and transplants. Produce strong root systems and atems, also more and larger flowers and fruit. SELL HYPONEX to your customers. Nationally advec-

BUY HYPONEX from your jobber or send \$1 for 1 lb. (makes 100 gallons). \$1 credited on first order for 1 drum or case.

HYDROPONIC CHEMICAL COMPANY, Inc. 315 West 39th Street, New York 18, N. Y.

New Books and Bulletins

"THE LAND AND WILDLIFE."

That soil conservation goes hand in hand with wildlife conservation is the thesis of "The Land and Wildlife," by Edward H. Graham, just published by the Oxford University Press. Dr. Graham's approach to the treatment of methods of land management beneficial to wildlife is twofold, based on the concepts that there are parcels of land better suited to wildlife than to the production of any other crop and that on all kinds of land there are numerous land-use practices that can be rendered valuable to wildlife by appropriate modification.

Out of a historical summary of three centuries of wildlife care in the United States is evolved the present concept of habitat improvement-the idea that wildlife (fish, birds, mammals and other wild vertebrate animals) depends largely on the kind of living conditions provided for it. Therefore, it is necessary in the future to look to the land-use pattern for permanent environmental improvements affecting wildlife welfare. Based on his experience as chief of the biology division of the United States Soil Conservation Service. Dr. Graham discusses methods of converting marshes and swamps, ponds and waters, stream banks and ditches, field borders and roadsides, windbreaks and hedges, gullies and spoil banks, croplands, pastures and wood lots and forests and ranges to land areas beneficial to wildlife. The book is illustrated with reproductions of many excellent photographs, graphically demonstrating the author's concept that where the land is well cared for, the people prosper and wildlife finds a congenial place to live.

FLOWER ARRANGEMENT.

With an emphasis on the expression of mood and emotion, which differentiates a mediocre but technically correct combination of flowers, containers and background from a truly artistic floral arrangement, Dorothy Biddle and her daughter, Dorothea Blom, have written a book, "Flower Arrangement for Everyone," in the interests of the American woman who has adopted flower arrangement as a hobby and an art. Eighty-one illustrations, most of them photographic reproductions of skillful arrangements with captions which further convey the feelings the designers have intended to express, add a

good deal to the aesthetic value of the 192-page book, which is published by M. Barrows & Co. at \$2.50 a copy.

So that the beginner may progress step by step until results comparable to those pictured in the book may be achieved, the authors discuss all aspects of the art. There is a summary of the evolution of flower arrangement and the application of the American casual approach and abundant floral resources to the restrained symbolism of lines and flowers expressed in the ancient Japanese art. Information on the choice of containers is supplemented by a list of plants for the "ideal picking garden," which will provide the kinds of plant forms and colors needed and a long season of materials for indoor

CORNELL PLANTATIONS.

An intimate record of the background, history and future prospects of the plan for the arboretum and botanical garden at Cornell University, Ithaca, N. Y., and of the men behind its development, "The Cornell Plantations: A History," by Ralph S. Hosmer, professor emeritus in the department of forestry, has been issued by the administrative committee of the Cornell Plantations of Cornell University, at \$3 a copy.

Professor Hosmer, who can trace his direct connection with the arboretum to the initial committee which was set up in 1928, has prepared a historical statement telling of the background of the arboretum and outlining the essential facts in the development of this project, which will eventually encompass the campus and the gorges and courses of Fall and Cascadilla creeks, joining these two regions in a great sweep of land behind Turkey hill, east of the campus. The present setup and future plans are indicated on the maps which are printed on the end papers of the book. A special section is devoted to the story of the preservation and development of the Cornell gorges under the gifts of Robert H. Treman and Henry W. Sackett.

In addition to the early work of such men as Prof. Albert N. Prentiss, the university's first professor of botany, and his successor, Prof. Willard W. Rowlee, the book tells of the recent progress toward the larger conception of the Cornell Plantations, named and largely evolved by Dr.



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ree Man, says:

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Nurseries Too, PROFIT by MODERN HANDLING METHODS



Loading shrubs by Rapid-Wheel Con-veyor at the Lindley Nurseries, Inc., Greensboro, N. C. This installation has effected a considerable savings in both labor and costs.

Faster handling of plants and shrubs on smooth rolling Rapid-Wheel Conveyors is "paying off" in decreased costs for many progressive nurserymen. One of these, Mr. J. Van Lindley, President of Lindley Nur-series, Inc., says: "With your equipment we are able to load our products on our trucks more rapidly than by methods for-merly used—and at a considerable savings in cost. Our plants arrive at their destination in better condition because they are moved from one point to another in our warehouse on your conveyor without hav-ing to be handled several times by hand."



Weber Bros., Royal Oak, Michigan, are thoroughly pleased with the way Rapid-Wheel moves their flats of seedlings in and out of the greenhouse and onto trucks for delivery.

Plants, potted in one end of a greenhouse, are placed on trays which travel over Rapid-Wheel Conveyor to concrete plats in another section. This has saved much hard work and extra handling of former trucking methods.



RAPID-WHEEL GRAVITY CONVEYORS

. . Can be set up anywhere in your nursery or greenhouse to convey plants and shrubs easily, efficiently and economically. There are eight standard models, two widths, each model varying in the number of wheels per foot. Standard 5' and 10' sections. Adjustable supports available.

Check these handling costs. . . . Write today for free information on how to reduce handling costs.

Rapids-Standard Co.,

Sales Div. 302 Peoples Nat'l Bank Bldg., Grand Rapids 2, Michigan

Rapid-Wheel Conveyor installation in a greenhouse takes up a minimum of space . . provides easy movement of trays of plants to any part of the



Liberty Hyde Bailey, who contributes an interpretative foreword to the book. In the opinion of Dr. Bailey, the Cornell Plantations are not merely a botanic garden and arboretum that serve only as adjuncts. to the department of botany. They are, rather, a project to unify into one organic whole a series of enterprises which include the systematic observation and study at Cornell of wild, economic and ornamental plants as a basis for research in the development of better forms of plants and animals for the wider service of man.

ROADSIDE DEVELOPMENT.

The report of the sixth annual short course on roadside development sponsored by Ohio State University with the cooperation of the Ohio department of highways contains a number of addresses and summaries of addresses of interest to nurserymen and tree experts who do roadside planting and maintenance work. Among these are "Insecticides and Germicides — Their Uses on Road-side Parks," by M. G. Farleman, of the California Spray-Chemical Corp.; "Weed Control by Chemical Treatment," by Franklin D. Jones, American Chemical Paint Co.; "Shade Tree

Root-Producing Powders

So economical no cutting should be made without using them.

Hormodin

No. 1-For most softwood and easy

13/4 oz., \$0.50; 1 lb., \$3.00. No. 2-For more difficult subjects. 13/4 oz., \$0.75; 1 lb., \$4.50.

No. 3-For all hardwood and the most difficult subjects. 1 oz., \$1.00; 1/2 lb., \$4.50.

Combination Package — Contains generous samples of all three powders. \$0.75.

Hormo Root

Root-producing powder combined with fungicide to protect against rot while in the rooting medium.

-For softwood and easy items. 2 oz., \$1.00; 1/2 lb., \$2.75; 1 lb., \$5.00.

B .- For easier evergreens and more

difficult shrubs. 2 oz., \$1.25; 1/2 lb., \$3.50; 1 lb., \$6.50.

C.—For the most difficult items. 2 oz., \$1.50; 1/2 lb., \$4.50; 1 lb., \$8.00.

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Disease Research," by Dr. Curtis May, principal pathologist of the United States Department of Agriculture; "The Latest Specifications Covering Landscape Development Operations," by Nelson M. Wells, principal landscape engineer of the landscape bureau of the New York state department of public works; "Something New in Roadside Opera-tions Equipment," by John Green, advertising manager of Seaman Motors, Inc., and "Practical Equipment for Roadside Constructions and Maintenance Operations," by E. Paul Shisler, landscape architect for the Ohio department of highways.

Copies of the report are obtainable from Prof. Charles R. Sutton, department of architecture and landscape architecture, Ohio State University, Columbus 10, Ohio, or from Dallas D. Dupre, landscape architect, Ohio department of highways, Columbus

15, Ohio.

HEMEROCALLIS YEARBOOK.

Dedicated to the noted midwestern hybridizer, Hans Peter Sass, the first vearbook of the Midwest Hemerocallis Society has been issued with yellow paper covers and a brown plastic binding. All but four of the more than 100 contributors to the 140-page booklet are members of the society. In addition to information on the society and on hemerocallises (day lilies) in general, there are sections giving the experiences of members in propagation, hybridizing, problems, artistic arrangements and garden uses. Area reports cover fifteen of the forty states represented in the membership of the society.

Although the society is only eight months old, membership is over 500, including commercial growers, scientists and amateurs. Anyone interested in day lilies may join; the \$3 annual dues cover a copy of the yearbook, occasional bulletins and use of the society's loan library. Additional copies are \$3 each.

FLORIDA NURSERIES.

Although the number of Florida nurseries going out of business in 1944 to 1945 was greater than the number of new nurseries, there being 301 of the former compared to 247 of the latter, the trend was reversed in 1945 to 1946, so that there were 405 new nurseries while only 260 went out of business. These and other interesting figures are presented in the sixteenth biennial report of the state plant board of Florida, covering the period of July 1, 1944, to June 30, 1946.

In general, there was a drop in



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\$132.50 with 24-in, blade. F.O.B. Factory

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PEAT PRODUCTS

Hypnum Peat Moss.....neutral 6.5 to 7.0 Black Cultivated Peat.....neutral 6.5 to 7.0

We can furnish you quality peats for YOUR needs. . . . For general soil conditioning, planting, propagating, packing, mulching, top dressing and bulb storage.

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both the approximate acreage and the amount of nursery stock in 1944 to 1945 as compared to the preceding and following years. The total acreage in 1943 to 1944 was 4,595.80, dropping in 1944 to 1945 to 4,439.38 and rising in 1945 to 1946 to 4,726.64. The total number of plants was 56,201,646 in 1943 to 1944; 48,993,030 in 1944 to 1945, and 51,177,177 in 1945 to 1946.

Although the acreage devoted to citrus stock was 130.33 less in 1945 to 1946 than it was in 1943 to 1944, the amount of stock grown increased by 4,315,200. Conversely, while the acreage devoted to noncitrus stock, including pecan, tung, fern and general and ornamental nursery stock, steadily increased from 3,031.33 in 1943 to 1944 to 3,292.50 in 1945 to

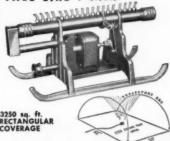
1946, the number of plants declined from 48,101,781 to 38,762,112 for the same periods.

The amount of citrus stock moved evidenced a steady climb from 1,648,584 in 1943 to 1944 to 3,766,275 in 1945 to 1946. This climb is especially true of seedling stock, which increased from 698,608 in the former period to 2,685,744 in the latter.

Although ferns and bulbs are not classified as nursery stock by the Florida plant board, these industries are of considerable importance in the state. In order to enable growers to comply with out-of-state regulations, fern and bulb plantings are inspected upon request. In 1945 to 1946, 1,492.50 acres of gladioli and 189.85 acres of lilies were inspected.



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The Shower-Queen design, construction and action in distributing water in a natural rain-like manner prevents rivulets, puddles and "bleeding" — all water is serified as it is thrown into the dir and broken up into drops. Trouble-free, centrifugal hydraulic motor operates oscillating shower bar. Simple hand adjustment regulates operating trajectory. Sled type runners for easy moving. 14½" long x 6½" wide x 6½" high. Positively guaranteed.

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Department A N

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Extend the Transplanting Season—Reduce Losses!



The Dew Chemical Company
Midland, Michigan

FLORIDA CONVENTION.

[Continued from page 11.]

information is transferred to a set of filing cards showing grade, number of each grade and the total. This card index should be kept up to date by posting daily orders. It will aid in determining future propagation.

In answer to the question "Do Seed and Department Store Sales of Nursery Stock Help the Nursery Industry?" Hibbard Casselburg, Orlando, thought they did, as such sales introduced the public to plants in a small way and brought people to the nursery for further purchases.

Concluding the program were a talk by Dr. W. J. Noer, Milwaukee, Wis., "Bacteriological Action in Pests," and a talk by Fred V. Grau, U. S. Golf Association, greens section, Beltsville, Md.

Among the subjects of interest to nurserymen at the florists' meetings was a talk by Arthur C. Brown, state plant commissioner, who told of the work of his department and in particular of plant quarantine measures and recent legislation.

Among the out-of-state nurserymen at the convention were a number from Texas, including Carl Shamburger, Hugh Mills, C. J. Lauden and W. E. Dyess, all from Tyler, and Frank Martin, from Arp.

FRAZER SERVICE MANAGER.

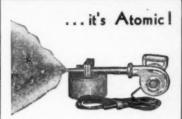
The appointment of D. M. Coons as manager of the parts and service division of Frazer Farm Equipment Corp., subsidiary of Graham-Paige Motors Corp., has been announced by Joseph W. Frazer, president of both companies.

Previous to his appointment with the Willow Run concern, Mr. Coons was service manager for Chandler-Evans Corp., West Hartford, Conn., a manufacturer of aircraft accessories. He was also associated with the Cadillac motorcar division of General Motors Corp., at Detroit.

Included in the Frazer farm equipment line are wagons, tractor-mounted manure loaders, the 5-horsepower Rototiller and other machines.

ADAM CHURA is proprietor of Adam's Nursery, a new firm at Benld, Ill. He is planting liners this spring, but at present is handling stock for resale to the retail trade.

FORMERLY known as Woods-Rey Nursery, the business at Oklahoma City, Okla., owned by W. E. Rey, is now known as Rey's Nursery.



MISTMASTER SPRAYER Shoots Insecticides up to Forty Feet !

KILLING bugs and insects that eat up plants, shrubs and trees—ordinarily a slow, tedious job—is speeded up and done properly with MISTMASTER Electric Insecticide Sprayer. It's motorized! It shoots penetrating liquids thru thick, bushy shrubs or plants—covers wide areas in less time.

MISTMASTER Sprayer sprays any liquid insecticide—and especially DDT. Equipped with a 3/5 to 1 h.p. G.E. universal motor, it has that super-power required for proper shooting of spray. It improves the application of any insecticide, and thus makes it more deadly. I-gallon spray tank. Weight, 7 to 14 lbs.

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Sprayer Corp. of America 1714 Payne St. Evanston, III.

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CHINESE TONKIN CANES

BAMBOO CANE STAKES

RAFFIA BULBS

Write for information.

McHUTCHISON & CO. 95 Chambers St. New York 7, N. Y.

Rubber Budding Strips

Gauge Width Length 50 lbs. 100 lbs. 00 lbs. 100 lbs. 100



PLANT NOTES.

[Continued from page 19.]

then it will surprise you by sending aloft treelike flowering stems, up to seven feet or more tall, with branches extending that much across and bearing an uncountable number of small, fragrant white crossflowers. No wonder that this prodigious effort is so weakening that the plant seldom has left sufficient strength to carry on.

Some Thoughts on Sweet Violets.

The great interest in sweet violets has been brought to my attention time and again this spring when visitors to the garden have stopped on coming upon odd varieties in spots that I had forgotten contained a violet. It tells me that neighborhood growers who do not have a representative list of these charmers are missing a lot of sales. It is not the purpose to enter into a full discussion of the subject at this time, but I should like to draw attention to a few out-of-the-ordinary items.

And first I should like to correct a false impression I left in this column several years ago when I stressed the tenderness of Viola odorata sulfurea (vilmoriniana of some). When I first secured it, perhaps the rarest of sweet violets, years ago to grow commercially, my losses were quite heavy from freezing after growth com-menced in spring. The plants were then grown in frames that could be covered when late hard freezes threatened or they were grown under glass for rapid propagation. Then, during the war when labor was not obtainable, the plants were left in a northward-facing frame, where the snow stayed late, and losses were little, if any, heavier than they were when the plants were coddled. It is one of the most unusual sweet violets that I know and commands immediate attention. It is true, as some writers point out, that it is quite leafy, but I find that it produces enough of its sulphur-yellow flowers, usually touched with violet on the back, to be attractive.

Royal Robe, with its large, wideopen, violet-blue flowers, if it behaves well for you, will be one of your best money-makers in sweet violets. Its behavior here has so far given no such promise, but there must be something wrong with my handling or the stock is debilitated. Fresh stock is under trial, and it is hoped that a more favorable report can be made later.

Lately, I have had under observation a variety known as Freckles, from its white flowers minutely dotted with

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blue. It is not especially beautiful, according to my way of thinking, but it does attract a lot of attention by its color and large flowers. It is a vigorous grower that would no doubt

Clematis Montana Undulata.

Although I seldom see this clematis in nurseries that I visit, I have watched it during the past ten years or more in the garden of a friend and have formed a good opinion of it. If you have calls for climbers (and most nurserymen have), it might pay you to investigate this one. There is an ever-increasing interest in clematis, anyway, that will make your path easier.

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made from the 150 or more species of clematis alone. Add to that the innumerable varieties which have been evolved naturally and by the hand of man, and you have a large field from which to choose, a field far larger, in fact, than the present paucity of material in gardens would indicate. Just where one should commence in an adventure of this kind is not for me to say, but a worse

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choice could be made than the plant whose name heads this paragraph.

When Clematis montana Undulata first came under my observation, it was said to be a cross between the well known type which has white anemone-like flowers or its variety grandiflora (the beauty with flowers three inches across) and the variety rubens, a form with reddish leaves and rose-pink flowers. I notice now, however, that "Hortus" gives its parentage as C. montana and C. gracilifolia, a graceful floriferous species of the montana group with white flowers. That does not explain the flower color of the child, but it does show where it got some of its beauty. The plant under consideration here is a vigorous climber, reaching a height of fifteen feet or possibly more in the rich soil that it prefers and producing 2-inch wide, light mauve (bluish-white, according to some observers) flowers from late April onward through May. A good soil for this plant is, according to its behavior in the garden under observation, one made rich with thoroughly rotted stable manure. Lime is also a necessary part of the growing medium of most kinds of clematis. It may be propagated from single-eye cuttings of green or nearly ripe wood inserted in sand under glass in summer. Wood

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taken from plants under glass is to be preferred.

Aster Amellus Summertime.

Although I sometimes have trouble getting Aster amellus varieties to do well in this garden, the behavior of Summertime in a friend's garden gives me hope that it is more amenable. If that proves to be the case, I believe we have a splendid addition to the list of summer bloomers for that difficult time after the June and early July procession has come to a halt and the fall parade is not ready to commence its movement. As it grew in my friend's trials, it became 18 to 24 inches tall, making a shapely bush covered with disease-resistant leaves, and in late summer smothered itself with large (to two inches across) violet-blue flowers. In addition to its value as a landscape plant (its blooming period alone will tell you how valuable it could be), it makes splendid cutting material.

Thalictrum Kiusianum.

If I have previously mentioned the little Asiatic meadow rue, Thalictrum kuisianum, there is sufficient reason in its beauty and usefulness to devote a little space to it again. Judging from experiences here over a period of ten years or more, it holds far more possibilities for landscape use than one would expect from so small a plant. Its greatest value, aside from its use in the shady rock garden, so it seems to me, is as a ground cover and as a carpet for shade-loving bulbs. Given shade, it is quite droughtresistant for being so shallow-rooted, and it spreads at a pleasing rate in a soil of sand and leaf mold. Its growth habits are quite unusual and make its propagation an easy matter. The stems send down roots a few inches from the parent, forming a little tuber, which may be detached to form a new plant. Or the entire plant may be taken up in spring, just as it commences growth, and divided into as many plants as it has tubers. The books say that it grows six inches tall; as it behaves here, it seldom exceeded half that height, although it does run true to its reputation of being a summer-long bloomer, producing a succession of pinkish lilac flowers over tiny tufts of lovely meadow rue foliage during that long period. It is a lovely plant of easy culture and one that should find ready sale in the neighborhood nursery.

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